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THE ULTIMATE GAMING SOLUTION

NEW
PC Gadget

It is to no surprise that today's video games have propelled an obscure industry into a multimillion endeavor. Players from all over the world, both young and old, strive to compete in numerous events to showcase their skill and wit for a chance to win coveted rewards and the honor that comes along with them. As they say, "to be the best, you have to have the best". ASUS, a company continuously striving for perfection, has brought upon a series of products to cater to the needs of gamers. With the Gamer and Strix series, the standard of performance is again set on a higher level.

ASUS GAMER SERIES MOTHERBOARDS

The Gamer series of motherboards befits its name as the features embedded inside the board not only affects the overall durability and integrity, but also helps gamers get the most out of their games. Solutions for audio, protection, and connectivity, provide gamers with their much needed advantage in competitive gaming.

GAMING AUDIO

For audio, ASUS employed the use of a formidable on-board solution in the form of the **SupremeFX** technology. With this feature, ASUS Gamer motherboards can reproduce essential high-quality audio. Another noteworthy feature is the **Sonic Radar**, a tool that determines the sources of noise, visually representing them by an unobtrusive and customizable UI.

ONLINE CONNECTIVITY

Say goodbye to lag and shoddy online connectivity as Gamer motherboards are equipped with the **Intel Gigabit Ethernet**. Efficient and fast, the Intel Ethernet ensures lag-free and reliable connection.

DURABILITY

Quality extends even outside the innards of Gamer motherboards. With the **Gamer's Guardian**, all Gamer motherboards employ above standard electronic components, guaranteeing the product's durability and extended lifespan.



ASUS STRIX GRAPHICS CARDS

Recent games are undoubtedly graphically demanding, requiring large amounts of processing power in order to produce quality images. A small drop in performance can cause jittering or below average images which can then prove disadvantageous for a gamer relying on vision to win. Strix graphics cards are the epitome of silence and reliability, balancing comfort and quality without compromise.

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HWM (HardwareMAG®) is published monthly by Hardware Zone Phils. Corp., under license by
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ED'S NOTE

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FIRST ONES

Just as we thought that this issue was already loaded with hot content, such as the 4K television and smart watch shootouts, Android One suddenly came into the picture (and on our cover).

While the launch of Android One was supposed to be a surprise here in the Philippines, we knew it was coming the moment we got word on a local Google event, as well as having known that the program debuted a few weeks earlier in Indonesia. Once February 17, 2015 came, so did Android's most ambitious program in our market to date.

Android One embodies everything that makes the mobile OS so attractive. Phones under the program are equipped with pure Android, stripped of all the bloatware and heavy skins present in most smartphone brands. They are also expected to be consistently updated with the latest firmware, putting them at the head of the pack in terms of features and optimization. Most of all, Android One devices are designed under Google's strict blueprints for highly capable yet affordable end products.

It's still in its infancy stages, with only a couple of manufacturers currently offering products under the banner, namely MyPhone and Cherry Mobile. Still, despite being part of the first generation, we can safely say that the devices are solid and that the future is incredibly bright. This is especially exciting for Filipino consumers, since we don't have easy access to Google's Nexus series in the country, so we have the next best thing at least.

For more on the event itself, head on over to our Scene section on page 18, and as for the full reviews, they begin at page 36. After those, we strongly recommend visiting a shop to see them for yourself. Trust us, you have to try them to truly appreciate.

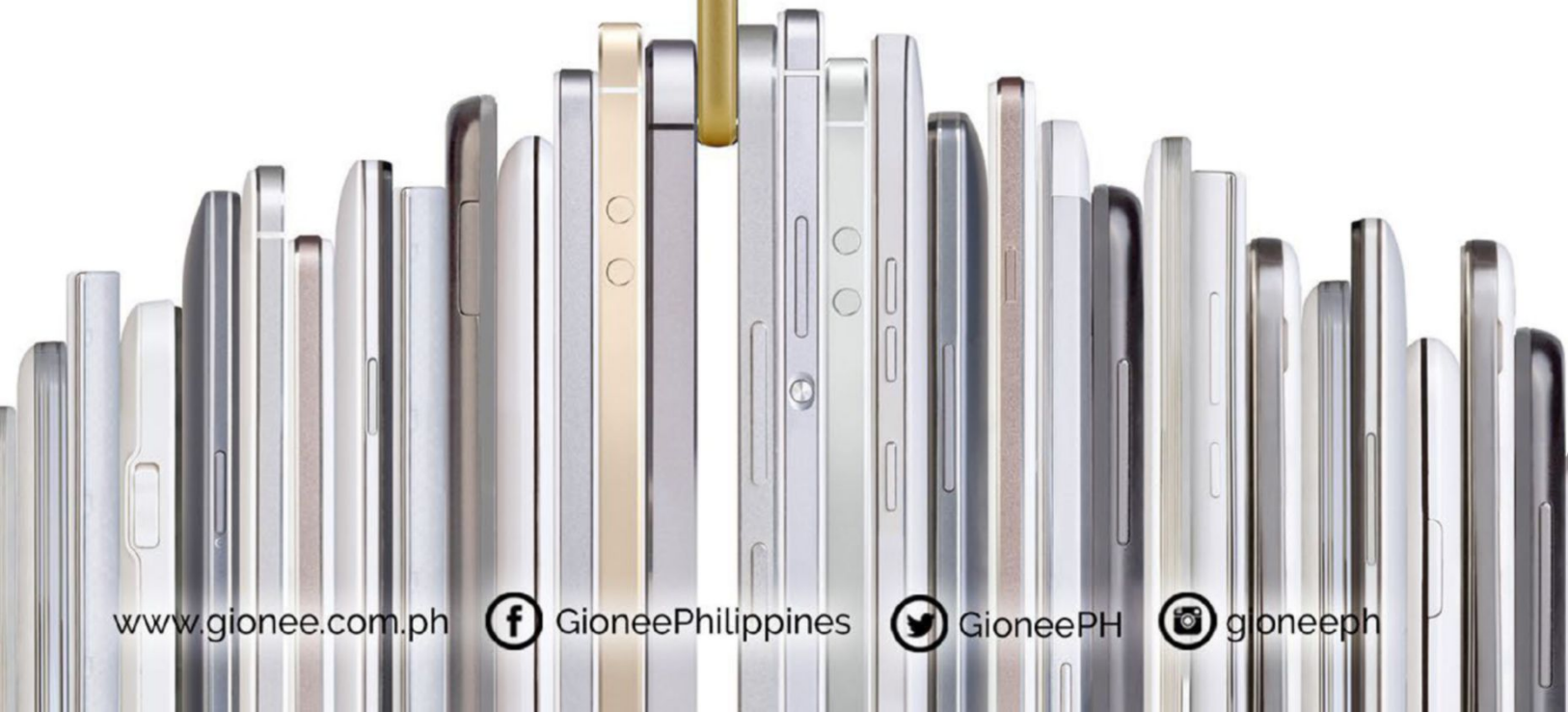
The HWM Team

Comments about this issue? Suggestions? The HWM Team would love to hear from you! Send us your thoughts at editor.ph@hwzcorp.com.



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THINK

CES 2015

■ The annual Consumer Electronics Show in Las Vegas sets the pace for tech trends throughout the rest of the year. We had front seats to what is arguably the biggest geek convention on the planet, and these are our top five trends to look out for in 2015.

Text by *Team HWM*





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HERALDING CARS OF THE FUTURE

For 2015, the latest buzzwords in the automotive world are ADAS (Advanced Driver Assistance Systems) and the return of hydrogen.

by Kenny Yeo

"TO HELP HYDROGEN CARS TAKE OFF, TOYOTA IS ALSO ALLOWING ITS COMPETITORS ACCESS TO ITS INTELLECTUAL PROPERTY OF AROUND 5,600 RELATED PATENTS."

Cars powered by hydrogen are not new. In 2002, Honda's FCX became the first hydrogen fuel-cell car in the world to be certified by the US EPA (Environmental Protection Agency) for commercial use. Hydrogen-powered cars use hydrogen combined with oxygen to produce electricity to power an electric motor that, in turn, provides motive force to the car. Impressively, the only by-product of this chemical reaction is water, and these cars could be refueled like regular cars simply by visiting a hydrogen pump station. However, despite the many benefits of hydrogen cars, they never quite took off for various reasons. Harvesting hydrogen proves to be an expensive and tricky process and developing hydrogen-powered cars is no simple feat either.

But despite the challenges, Toyota has announced the Mirai, its own hydrogen-powered car, and plans to sell 700 of it globally this year. The Mirai is a 4-door sedan and refueling it takes about five minutes – comparable to traditional gasoline-powered vehicles. When fueled, it has a range of about 480km. To help hydrogen cars take off, Toyota is also allowing its competitors access to its intellectual property of around 5,600 related patents. Currently, Honda, General Motors, and Nissan are said to be examining hydrogen fuel-cells to power their cars of the future.

Hydrogen cars aside, one thing that we are going to see more of from cars of the future is ADAS (Advanced Driver Assistance Systems). Broadly put, ADAS refers to technologies that will make driving both easier and safer. Hyundai painted a future where its cars could park themselves, navigate themselves through narrow streets, detect pedestrians, and even analyze traffic intersections and brake automatically if they deem it unsafe to proceed. However, doing so requires lots of computing power, so NVIDIA wasted no time in announcing its new DrivePX supercomputer for the car. Powered by the company's new Tegra X1 processor, the DrivePX aims to be the brain for the cars' systems, allowing them to drive themselves autonomously. Audi has expressed its commitment to using NVIDIA's DrivePX platform in its cars.

That is the future. For now, automakers are looking at ways to make it easier for drivers to interact with their cars and to make cars smarter. Ford's Sync 3 in-car infotainment system can receive system updates, such as the latest maps via Wi-Fi. Volkswagen also showed off its new gesture control system, with the ultimate goal being the elimination of all physical switches.

These are exciting times for the auto industry as it seeks to enter a new age. Though many of these concepts are still in their infancy, we fully expect things to progress exponentially in the next few years as more companies throw their weight behind these new technologies and platforms.



MOBILE OPERATING SYSTEMS GRADUATE TO THE BIG SCREEN


Here's wishing Firefox OS, Tizen, and WebOS all the success in their TV futures.

by Ng Chong Seng

■ The two things TV manufacturers traditionally competed in – picture quality and design – were largely driven by the hardware engineering department. Sure, software engineering still happened, but its work was rarely thrust to the fore by the marketing department. After all, “hard” features like new pixel matrices, curved screens, and voice controls all make for better tent-pole features in the brochures than, say, a pretty onscreen menu or fast input switching.

But as TVs became more powerful and home entertainment more complex, TV makers also began the race to tick as many checkboxes as possible in the features list: wireless streaming, web browsing, screen mirroring, voice interaction, social media support, you name it. The results, more often than not, were convoluted, clunky, and downright ugly user interfaces. TV makers will not admit it, but their smart TV creations have brutally exposed their ineptness in UI and UX designs.

After years of quick fixes that eventually led nowhere, TV manufacturers are now turning to mobile operating systems en masse. LG led the charge with WebOS in 2014, and at this year's CES, the company wheeled out its latest WebOS 2.0-powered TVs. Not to be outdone, cross-town rival Samsung announced that Tizen OS will be the foundation of its smart TV platform moving forward. Across the Sea of Japan, Panasonic has embraced Mozilla's Firefox OS, while Sharp and Sony have jumped onboard Google's Android TV system. Yes, TV makers may still screw it all up in the name of differentiation, but I've high hopes that because of the mobile roots of these OSes, the smart TV experience (from boot times and menu navigation, to multitasking and device interoperability) will take a huge step forward from now on.



"AFTER YEARS OF QUICK FIXES THAT EVENTUALLY LED NOWHERE, TV MANUFACTURERS ARE NOW TURNING TO MOBILE OPERATING SYSTEMS EN MASSE."

WEARABLES: FROM SMART SHIRTS TO PET TRACKERS

The year where one can probably find a smart tracker in everything.

by James Lu

When it comes to wearables, for now, the hottest piece of real estate is undoubtedly your wrist, but after CES 2015, that might start to change. Among the Innovation Award winners at this year's CES was a shirt that uses fiber-optic cabling to track and model your body's movement, a heart-rate-monitoring strip that sticks to a user's torso, and a helmet that can measure and soothe your stress levels. Some exhibitors even debuted wearables for pets.

Smart shirts that can track your activity are nothing new, but shirts made out of a revolutionary new material called XelfleX could completely change smart clothing. The material makes use of fiber-optic cabling and advanced data algorithms to track your body's movement in incredible detail. It works through backscatter data created whenever fiber-optic cabling is bent or twisted. This data can then be used to create a real-time, perfect 3D model of what the user's arm is doing. The possibilities for fitness or sports coaching are endless, but we might also see XelfleX paired with gear like Oculus Rift to further enhance the VR experience.

One area showing great interest in new wearables is healthcare. Rather than hooking patients up to bulky machines to monitor their vitals, a device such as the AmpStrip, an adhesive patch with a built-in electrocardiogram sensor could be stuck to your chest like a band-aid, and used to monitor your heart-rate and activity, syncs that data in real time directly with the hospital's computers. CES also saw the debut of the Melomind helmet, which uses electrodes to measure levels of stress via brain activity, and then plays appropriately soothing musical tones to put wearers in a more relaxed state. Chronic pain sufferers may also be interested in the Quell band, which uses electrodes to stimulate nerves for pain relief.

Pets are now a target market for wearables, too, with the introduction of products like WonderWoof, a Wi-Fi-enabled bow-tie with a built-in accelerometer that you can attach to your pet's collar. The device will track where your pet is, and give feedback about his activity. The app also supports a scheduler which provides users with a "doggy diary" for daily activities. WonderWoof's creator, Betsy Fore, created the device after realizing that her dog was fat, and then realizing that she had no idea why her pet was packing on the pounds.

"SMART SHIRTS THAT CAN TRACK YOUR ACTIVITY ARE NOTHING NEW, BUT SHIRTS MADE OUT OF A REVOLUTIONARY NEW MATERIAL CALLED XELFLEX COULD COMPLETELY CHANGE SMART CLOTHING."

AUDIO CUTS THE CORD

If 2014 was the introduction of High-Resolution Audio to the mainstream, 2015 will be the year of quality wireless audio.

by *Marcus Wong*

■ The buzz for audio products at CES 2015 remains very much on High-Resolution Audio (HRA) coupled with wireless technologies, with new wireless models from AKG, Sennheiser, Sony, and Onkyo all on show. While wireless headphones are not new, they seem to be more predominant this year, perhaps indicating that there is indeed value to less clutter.

That's especially evident when you look at the multi-room audio streamer segment. Once the sole domain of Sonos, many mainstream makers have since released their own offerings, making it easier than ever to have a speaker in every room, all controlled from a single device. Play a different song on each, or have all the speakers play the same song together; the introduction of technologies like Google Cast will make it easier for these songs to come from the cloud or just any smart device.

Expect to see more streaming services offering HRA streaming in the coming years, which means we will also need wireless technologies that better support the bandwidth that HRA demands. Sony may have a head start with its new LDAC Bluetooth codec. Supposedly three times more efficient than the previous Bluetooth technology, this allows it to better support the bandwidth needed for high-resolution audio files, and it'll be interesting to see if this becomes a standard, or if the other makers launch their own bandwidth-efficient codecs.

HRA has also left room for a revival of portable media players, as unlike mobile phones which get bogged down by games and photos, these players basically offer dedicated storage just for audio, as well as higher-quality DACs (Digital Analog Converters) that better cater to audiophiles. Large onboard memory and a memory card slot for easy expansion, as well as Wi-Fi/network support to access various streaming services, should be the norm in this year's devices.

Finally, integrated sound processing technologies are also being incorporated into the headphones itself, like Parrot's Zik Sport earphones (which feature 32-bit sound processing) and the impressive Neoh headphones by 3D Sound Labs, which use motion sensors and the way we perceive sound to recreate the effect of three-dimensional sound in your head.



"EXPECT TO SEE MORE STREAMING SERVICES OFFERING HRA STREAMING IN THE COMING YEARS, WHICH MEANS WE WILL ALSO NEED WIRELESS TECHNOLOGIES THAT BETTER SUPPORT THE BANDWIDTH THAT HRA DEMANDS."

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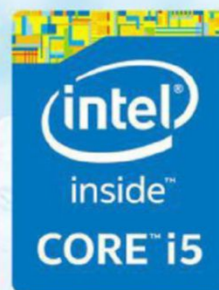
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androidone is here!

Google has finally brought Android One to the Philippines. With the aim of providing high-quality and affordable smartphones to as many customers as possible, Google teamed up with local mobile device brands, Cherry Mobile and MyPhone, to sell Android One smartphones that come with Android Lollipop out of the box, called Cherry One and MyPhone Uno, respectively.

In a nutshell, these Android One devices will have a microSD slot, dual-SIM capabilities, replaceable batteries, a built-in FM radio, and either 4GB or 8GB of internal storage. The Cherry One and MyPhone Uno are both priced at less than five thousand pesos, and will be distributed via retail stores nationwide.



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Look Ma, No Bump

Here's our review of the 5.7-inch **Xiaomi Mi Note**, a thin and light premium phablet equipped with a Snapdragon 801 SoC, 13MP camera with OIS, and high-end audio.

Review: Xiaomi Mi Note

Review: Samsung Galaxy Alpha

Review: Sony Cyber-shot HX60V

Hands-on: LG G Flex 2

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NVIDIA announces GRID vGPU technology availability on VMware Horizon 6

NEWS / 04 Feb 2015 / 2 hours 12 min ago

NVIDIA has announced the availability of the GRID vGPU technology on VMware Horizon 6. Find out how centralized GPU computing capabilities can be offered on virtualized and remote desktops.



Google Philippines releases most popular YouTube ads in PH

NEWS / 04 Feb 2015 / 6 hours 5 min ago

Google Philippines has released the 2014 YouTube Ads Leaderboard, revealing that not only do Filipinos respond well to culturally-relevant ads, but that the local advertising industry has gotten more accustomed to placing made-for-web content at the heart of their campaigns.



LG presents topnotch Valentine's Day gift ideas

NEWS / 04 Feb 2015 / 8 hours 44 min ago

Chancing upon the perfect gift for your Valentine is not an easy task. It has to be unique yet enduring, personal yet practical, and most importantly, it has to be something they can appreciate and enjoy. LG Electronics has taken out the guesswork with their wide range of innovative and exciting gift ideas that your special someone will tirelessly cherish.



Oppo launches Mirror 3 in the Philippines

NEWS / 03 Feb 2015 / 19 hours 14 min ago

Oppo makes the Mirror 3 officially available in the Philippines. This smartphone boasts a 4.7-inch HD display, 64-bit Snapdragon 410 CPU, 8-megapixel rear camera w/ flash, and 5-megapixel front camera for stunning selfie photos.



Nokia Lumia 830: Premium looks on the budget

REVIEW / 18 Dec 2014



Demo: Xiaomi MIUI V5's Unique Features

The latest release of Xiaomi's MIUI, now V5, is laden with various features. In this video, we demonstrate these features by using the affordable yet powerful Xiaomi Redmi.



LG Launches OLED TVs That Double as Wall Paintings

04 Feb 2014 / By Kevin Bruce Francisco



Toshiba Brings in new L Series Pro Theatre and P Series TVs to the Philippines

16 Dec 2013 / By Martin James David



Bose VideoWave Entertainment System Hits PH Market, Sells for PPh 350,000

13 Dec 2011 / By Lionell Go Macahilig



MyPhone Rio 5-inch Quad-core Dual-SIM Android Jelly Bean Smartphone Sells Below 5K (Updated)

17 Apr 2014 / By Lionell Go



The Next Best Thing



At the fifth Wonderful World with Globe event, video-on-demand app HOOQ was introduced to the public. With Netflix not available in the Philippines, it seems that HOOQ is the next best thing, as it promises to come with over 10,000 titles on launch with a slew of content partners, local and international. HOOQ is a start-up company that is a product of the team-up between Singtel, Sony Pictures Television, and Warner Bros. Entertainment. This service will allow Globe Telecom subscribers to have unlimited access to local and foreign TV shows and movies. This service works on various platforms such as computers, smartphones, and tablets.



A Little Resemblance

Lenovo recently made the S90 smartphone official in the Philippines. This smartphone features an aluminum alloy unibody design that boasts an 8-megapixel fixed focus front camera with flash, ideal for selfies, and a 13-megapixel main camera with a PureCel sensor. One thing that's quickly noticed upon seeing the Lenovo S90 is its resemblance to the Apple iPhone 6. Comparing the front, the S90 just has a different set of buttons at the bottom, which is similar to other Android phones, while the iPhone 6 has only one rounded Home button at the bottom, similar to its predecessors. Additionally, the location of the microphone and notification light on top deviate a little.



A Bit More Interactive



Brother Philippines recently introduced a new way to make things even more interactive between the company and the customers through the new Customer+ Loyalty Program. The program is a fully integrated customer program that offers comprehensive training sessions with Brother customers in Metro Manila. The customer program focuses on brand and service excellence, creating a life-long customer relationship. Through it, customers can maximize the benefit of Brother products, get user training, and make use of the help desk with an exclusive number to contact when they are in need.



A New Buying Innovation



Smart just introduced an innovation that will make buying apps and making in-app purchases on your iPhone or iPad a lot easier. With its new Pay-with-Mobile service, you can buy apps, music, movies, and a lot more without the use of a credit card. Just register using the account number it provides, similar to a virtual credit card, to make purchases on the Apple Store or iTunes. To use it, simply text REG to 4949 and wait for the account details to be sent back to you. Once you received the Pay-with-Mobile number, along with other important details, go to the Apple ID account settings page on the App Store or iTunes and select "MasterCard" as the payment option. Then, key in the number and other details on the corresponding fields.



Chauffer-Style Transport

GrabCar, one of the country's leading car-booking apps, has expanded its services with the launch of GrabCar+ which offers high-end, chauffer-style transport service for commuters in the Philippines. With the new premium app, commuters can choose from a line of luxury car models that includes the Fortuner, Montero, Camry, Hummer, and Tucson, and enjoy a safe and high-end ride with no worries of paying extra during detours or heavy traffic. GrabCar+ offers fixed pricing, and customers have an option to pay with cash, debit, or credit card. To book one of the luxury cars, just download the GrabTaxi app on the Apple Store, Google Play Store, or BlackBerry World.



The Scooter Revolution



The Honda scooter revolution in the Philippines continues with the launch of the new Honda Click 125i. The new model is equipped with the new-generation intelligent 125cc global engine with cutting-edge technological features, developed simultaneously with other Honda-dominated scooter countries like Thailand and Indonesia. The Click 125i presents customers with a rugged, sporty design, but with a sleek and innovative look. It is based on the image of the new engine that features cutting-edge technology, bringing riders to an exhilarating ride, while at the same time projecting a "slim and sharp" futuristic image.



High-Tech Hospital

TAP FOR
WEBSITE 

St. Luke Launches Its New MedConnect App



St. Luke's Medical Center (SLMC), a leading healthcare institution in the country that has 12 institutes and various departments and centers serving its patients, launched its first mobile application, the St. Luke's MedConnect, which gives the public easy access to the hospital's healthcare services.

The new St. Luke's MedConnect app is considered to be the first fully functional application for the healthcare industry. It includes special features wherein users can request a doctor's appointment, access one's laboratory results, reserve a room, pay online, make schedules for executive checkups, and read essential information.

Interested users can download the app via the Apple App Store or Google Play. There will also be print and online ads that have a QR code that connects to the St. Luke's MedConnect webpage directly.

Alongside the introduction of the new mobile application, SLMC continues to take a multidisciplinary and comprehensive approach to the diagnosis and treatment of specific medical conditions. It has invested in the most advanced medical technologies and equipment, which provide the most accurate diagnostics possible.

St. Luke's Medical Center has two facilities: one in Quezon City and the other one in Global City, Taguig. The passion to continuously improve, redefine, and evolve excellence in medical and patient services has been the cornerstone of the healthcare institution's mission to deliver state-of-the-art healthcare. This is also guided by key drivers: good clinical outcomes, patient safety, education, training and research, great patient experience, and financial viability.

For more information on the St. Luke's Medical Center MedConnect mobile application, you can visit www.stduke.com.ph.

Projecting Global Traffic

TAP FOR
WEBSITE 

Cisco Global Cloud Index Projects Data Center Traffic to Nearly Triple



In the fourth annual Cisco Global Cloud Index (2013 to 2018) that was issued recently, Cisco forecast continued strong growth of cloud traffic, cloud workloads, and cloud storage, with private cloud significantly larger than public cloud.

Over the next five years, the study projects data center traffic to nearly triple, with the cloud representing 76 percent of total data center traffic. By 2018, half of the world's population will have residential Internet access, and more than half of those users' (53 percent) content will be supported by personal cloud storage services.

The study predicts that global data center traffic will nearly triple from 2013 to 2018 with a combined annual growth rate (CAGR) of 23 percent, growing from 3.1 zettabytes/year in 2013 to 8.6 zettabytes/year in 2018. The 8.6 zettabytes of data center traffic predicted for 2018 is equivalent to streaming all of the movies (approximately 500,000) and television shows (3 million) ever made in ultra-high definition (UHD), 250,000 times.

The global cloud traffic is growing faster than the overall global data center traffic. In 2013, the cloud accounted for 54 percent of total data center traffic, and, by 2018, the cloud is projected to account for 76 percent of total data center traffic. Data center traffic includes data center-to-user traffic, along with data center-to-data center traffic and traffic that remains within data centers.

By 2018, 53 percent of all residential Internet users globally will use personal cloud storage, and the average consumer cloud storage traffic per user will be 811 megabytes per month by 2018, compared to 186 megabytes per month in 2013.

By 2018, 69 percent (113.5 million) of the cloud workloads will be in private cloud data centers, down from 78 percent (44.2 million) in 2013, and 31 percent (52 million) of the cloud workloads will be in public cloud data centers, up from 22 percent (12.7 million) in 2013.

To know more about Cisco and the global data center traffic, simply visit www.cisco.com.



**GRADUATION
BLOWOUT**
Amazing discounts of up to 60%



TECHBOX GRADUATION BLOWOUT



Techbox Salutes Graduates with up to 60% Discounts on Mobile Phones



In celebration of the graduation season, Techbox Philippines will be offering a 60% discount on the LG G2 and a 50% discount on Nokia Lumia 620 handsets in all Techbox branches from March 1 to 30.

"These days, graduating is a real challenge. The workload is incredible, and the pressure to do well not only on academics but also on extra-curricular activities cannot be underestimated. Those who successfully hurdle all the challenges truly deserve recognition," said Angela Gutierrez, Business Unit Head for Techbox Philippines.

According to Gutierrez, the Techbox Graduation Blowout is their way

of celebrating with the graduates. Customers who are interested in the promo can go to the following Techbox stores: Alphaland Southgate Mall, Riverbanks, Tanay Town Center, Victory Mall Caloocan, Pavilion Mall in Binan, Tutuban Mall, Robinsons Dasmarinas, Xentro Neo Calapan, Mindoro, Robinsons Forum, and Metro Pacific in Lucena.

For offering trusted handset brands and cellphone accessories at an affordable price, Techbox Philippines has become the fastest-growing gadget retail chain in the country.

To get the latest Techbox Philippines' deals, please check out www.techboxhub.com.

INTRODUCING HIGH-END GRAPHICS

PlayStation 4 Shows Off *Bloodborne* and *The Order: 1886*



SONY

Imperium e-Sports bar and Video Game Lounge has been the place to be for elite gamers and gaming enthusiasts. It was where the exclusive preview and demo of two of the most awaited games of the year was held, introducing both *Bloodborne* and *The Order: 1886*.

The Order: 1886 is a third-person action-adventure that takes you to Victorian-era London where myths and technology coexist. You play as Sir Galahad, an expert tracker and hunter whose instincts and skills are developed over the years of fighting half-breeds. Sir Galahad is equipped with "Blackwater," a special liquid that gives him an extraordinary healing capability. The graphics quality is realistic, and despite being outputted on

a large screen, there was no visible pixelation at all, and its immersive and film-like gameplay just made it more appealing.

Bloodborne, on the other hand, is an action role-playing game that lets you choose from four different characters, each with their unique abilities and skills. Its story takes place in the ancient city of Yharnam where a curse was cast, causing a strange endemic illness to spread through the streets. It was also outputted on a large screen, but, still, there was no sign of pixelation. Sony's PlayStation 4 surpasses expectations when it comes to graphics quality and resolution capabilities. Its ability to output these games on a big screen without any signs of pixelation is impressive.

Go online and visit www.sony.com.ph for more details.

BUDDING PARTNERSHIP

Ardent Networks, Inc. and Addasound Build Partnership



Ardent Networks Incorporated, the value-added distributor from the LAMCO Group of companies, has secured its partnership with the headset manufacturer Addasound.

In a contract signing event held in Ardent Networks' office, Anthony Joseph De Jesus, VP for Product Management of Ardent Networks, Inc. and Ms. Loren Remo-Aguilar, Country Representative of Addasound Philippines, completed the association of the two companies in late January.

Addasound, a Denmark-based company that is an expert in the electro-acoustics field, has led the world in sound technology and has built a reputation of excellence in the industry. With its vision, "sound changing the world," Addasound works persistently in improving voice input quality, which will assure a future of sound serving us better.

Addasound also puts effort in preparing people in embracing a new era of intelligent voice interaction, which will play an enormous role in each aspect of a person's life.

Ardent Networks, Inc., an icon of sustainability, is a pioneer in the Philippine IT distribution industry. Its expertise in the interplay of product selection, knowledge of the market, operational efficiency, and product availability provides Ardent Networks and its business partners an edge in the marketplace.

Addasound, together with Ardent Networks, is positive that the partnership extends potentials in consistently developing the business of both companies.

To know more about Addasound and Ardent Networks, Inc., you can visit www.addasound.dk and www.ardentnetworks.com.ph.



RICHARD DE QUINA, VP FOR MARKETING AND BUSINESS DEVELOPMENT, MYPHONE

What makes MyPhone different from other local brands?

We were very careful in terms of how we introduced MyPhone, as we wanted to ensure that we provide the local market with affordable and durable products, backing it up with a comprehensive nationwide service center, which up to this day has differentiated us from other brands, both local and international.

What is the product that MyPhone is truly proud of?

We take pride in the products we produce, and most importantly, give Filipinos a brand they can be proud of. There was a time, seven years ago, when most people bought second-hand units in Greenhills. That all changed when MyPhone was able to introduce value-for-money products, which completely changed the landscape of the mobile phone industry in the country.

When it comes to being competitive, how do you rank MyPhone against its competitors?

There was a time when global brands' technological advancements were years ahead of us, but as the industry grew at breakneck speed, it gave other players the opportunity to directly compete with the global brands in terms of technology. MyPhone has been on the forefront in terms of developing technologically competitive models that could directly be compared with the global brands.

So far, what has been the biggest challenge you had to face as MyPhone's Vice President for Marketing?

During the early years of MyPhone, the biggest challenge was market acceptance – acceptance for a local brand brave enough to challenge the global brands and can offer high-quality and value-for-money products, which previously were nonexistent in the mobile phone industry. In the years that followed, with the advent of major players from both the local and international brands, it separated the MyPhone brand, making it the mobile phone of choice among the Filipino consumers. In the future, the challenge is to continuously build the MyPhone brand, a brand that represents the Filipino people, and a brand that will be respected by generations to come.

MyPhone is known for releasing affordable smartphones and tablets. Do you have plans to diversify into new categories in the near future?

Definitely! It is an exciting time for MyPhone and the industry, in general. New groundbreaking products and services will be introduced in the near future. We are continuously collaborating with our partners in developing products that will directly benefit the local, and even the international, market.

THE FUTURE OF HOME APPLIANCES

TAP FOR
WEBSITE 

SNIPPETS FROM SAMSUNG SEA FORUM 2015

SAMSUNG Ever since the Consumer Electronics Show in January, Samsung has been hitting new strides with their 2015 lineup of smart gadgets and appliances. Showcased at the recent Southeast Asia Forum in Bangkok, Samsung's smart home vision isn't just to introduce appliances with embedded technology in them, but to improve functionality and efficiency.



TV UPDATES FOR LIVING ROOMS

We've already covered Samsung's latest SUHD TV technologies at CES 2015, and while there isn't really anything new at the SEA Forum, Samsung did unveil plans for content and features specifically for the region. Among these, Malaysia and the Philippines will get to enjoy a curated selection of international TV shows through Samsung Seasons. The first episodes are free, while the rest of the season can be rented for a month, viewable on Samsung Smart TVs, smartphones, and tablets.



SMARTENING UP YOUR HOME

One of the first appliances to be showcased is the RF9900 Chef Collection 4-door fridge. The RF9900 comes with advanced wizardry to maintain set temperatures better than conventional fridges, reducing temperature fluctuations from 1.5 degrees Celsius to just 0.5 degrees Celsius. According to Samsung, this temperature consistency is paramount not just for food preservation, but maintaining ideal conditions for food preparation as well. To this end, the fridge comes with various compartments that can perform very specific functions.

Samsung's new Activ Dualwash washing machines are designed to make the task simpler. Of course, these new washing machines all come with a host of advanced technologies that are supposed to wash and maintain your clothes better than ever. Basically, what they've done is integrate a wash basin to the lid without reducing the standard capacity of the washing machine. Unlike LG's solution of having a 2-in-1 washing machine, Samsung's approach feels more practical, as having different wash requirements may not be something you do every time there's laundry.





SUPER SLIM AND LIGHT

ASUS Zenbook UX305

www.asus.com/ph

Powered by Intel's new low-power Core M processor – the dual-core M-5Y10 that runs at 800MHz – the ASUS Zenbook UX305 is considered to be the slimmest Ultrabook. It measures only 12.3mm thick and weighs just 1.2kg. With a low TDP of just 4.5W, this new processor can be cooled passively, allowing manufacturers to design super slim and light notebooks. It flaunts a 13.3-inch display with a 1920 x 1080 resolution, and comes with 4GB of RAM and a 128GB SSD. Despite being slim, it still features three USB 3.0 ports, bundled with a USB Ethernet adapter.



We Do **Events!**

***** Driven by a team of passionate technology professionals, Hardware Zone Events Services have the expertise, talent, and experience to conceptualize and execute any customized on-ground activation project to meet your business objectives.

Our Proposition

- Total service orientation
- Sound strategies that stem from strong consumer insight
- Creative and out-of-the box executions
- Cost efficient programs
- Clear measures of project effectivity

Our Service Menu

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- Road Shows
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- Corporate Events
- Trade Activations

Promotions

- Consumer, Trade, And Internal Promotions
- Sales Promos
- Sponsorship Tie-ins
- Manpower Management

Relationship Marketing

- Direct Mail
- Efforts
- Loyalty Programs
- Team-Building Activities
- Customer Relation Mgt.



TAP FOR

WEBSITE



INTO THE STARS

Nikon D810A

www.nikon.ph

Considered to be a specialist edition of the D810 from Nikon, the new D810A is designed for astrophotography. It's still a 36.3-megapixel full-frame DSLR, but it is now equipped with the ability to capture astronomical subjects that emit the H-alpha wavelengths of light, such as nebulae and other distant galaxies in red due to its modified IR-cut filter. It also features longer exposures in low-light conditions with minimal noise. A live view preview function should also come in handy for astrophotographers when they plan their shots.

NEW AND IMPROVED

Canon EOS M3

www.canon.com.ph

Looking very similar to the EOS M2 from Canon, the new EOS M3 can easily be mistaken as the previous model if not for the handgrip on the front and the inclusion of a pop-up flash. It also has a tilting touchscreen LCD that flips up by 180 degrees for selfies or low-angle shots. It comes with a new 24.2-megapixel CMOS sensor, the latest DIGIC 6 image processor, and an ISO range of 100 to 12800 (expandable to 25600). Using a Hybrid CMOS AF III system, it offers improved autofocus performance that is approximately 6.1 times faster than the original EOS M.





TAP FOR
WEBSITE 

FOR YOUR POCKET

Samsung NX500

www.samsung.com/ph

The new Samsung NX500 mirrorless digital camera appears to be the tiny and sleek version of the flagship NX1. It features the same 28.2-megapixel BSI APS-C CMOS sensor, 4K and UHD video recording, DRiME V image processor, NX Autofocus System III for faster autofocus performance, and Bluetooth and Wi-Fi options to allow users to easily shoot and share images. It flaunts a tilting 3-inch LCD touchscreen display that can point forward, allowing users to easily take selfies, and it comes in a choice of three colors: black, white, or brown.

HUGE UPGRADE

Meizu MX4 Pro

www.meizu.com

Featuring the highest-resolution screen on a mobile phone or phablet at 2560 x 1536, the new Meizu MX4 Pro easily sprints to the top. It is nearly identical to the MX4, but its upgrades set it apart. It now has 3GB of RAM, a higher-resolution 5-megapixel front-facing camera, a bigger 5.5-inch IPS LCD display, an advanced 20nm Exynos 5430 octa-core processor, and a fully encrypted security feature called the mTouch that takes less than 0.5 second to work. It also supports five network types and 13 frequency bands that allow you to connect to faster data providers around the globe.

TAP FOR
WEBSITE 



ZTE BLADE S6

// US\$ 249.99



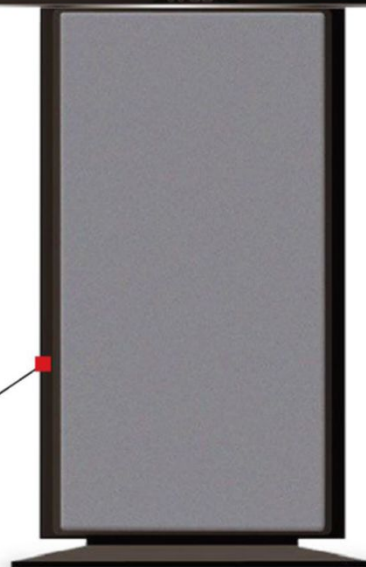
The first smartphone powered by a Qualcomm Snapdragon 615 octa-core processor and running on Android 5.0 Lollipop, the new ZTE Blade S6 is designed to be "fun." With that in mind, it has been equipped with a number of gesture-based SmartSense commands. www.ztedevice.com



PANASONIC LUMIX DMC-GF7W



A mirrorless camera with a 16-megapixel Digital Live MOS sensor that works with a Venus Imaging engine, the new Panasonic Lumix DMC-GF7W makes taking portraits easy for any photographer out there. It also has a 180-degree tiltable LCD to better compose selfies. www.panasonic.com/ph



SEAGATE NAS PRO 2-BAY

// US\$ 829.99



Very much accessible and simple to set up, the Seagate NAS Pro 2-Bay provides you easy access to all your private cloud and other important files, including third-party apps and other storage features. It runs on Seagate's NAS OS 4 software, completely designed for your convenience. www.seagate.com

SHARP ACTIVE MULTIMEDIA

// PhP 33,298



With Sharp Active Multimedia's 32-inch LED display, you can have a more exciting viewing and singing experience. It has no irritating wires scattered around, and has two microphone inputs so you can invite anyone who wants to jump in and sing a part of the song that's being played. www.sharp.ph

OPPO MIRROR 3

// PhP 10,990



Boasting a 4.7-inch HD display, an 8-megapixel rear camera, and a 5-megapixel front-facing camera, the new Oppo Mirror 3 is your partner for taking stunning selfie shots. It is built with a 64-bit Snapdragon 410 CPU and has Oppo's ColorOS user interface. oppo.com.ph



CANON IXUS 170

// US\$ 150



Featuring a high-resolution 20-megapixel CCD sensor at a competitive price point, the Canon IXUS 170 provides images of remarkable quality. It has a 12x zoom lens with a 25-300mm range, versatile for wide group shots and close-ups of distant subjects. www.canon.com.ph



TOSHIBA MQ03ABB300



If you need more storage, the new 2.5-inch Toshiba MQ03ABB300 hard disk drive will give you that with its 3TB storage capacity, achieved by using four platters of 750GB. It spins at 5400rpm, and sees action in notebooks and other compatible devices. www.toshiba.ph



KINGSTON HYPERX CLOUD II

// US\$ 149.99

The new Kingston HyperX Cloud II is a well-built, comfortable, remarkable-sounding pair of over-ear gaming headphones that comes with an optional USB sound card. It features a 3.5mm port for the headset, and comes with extra earpads and a boom mic. www.kingston.com



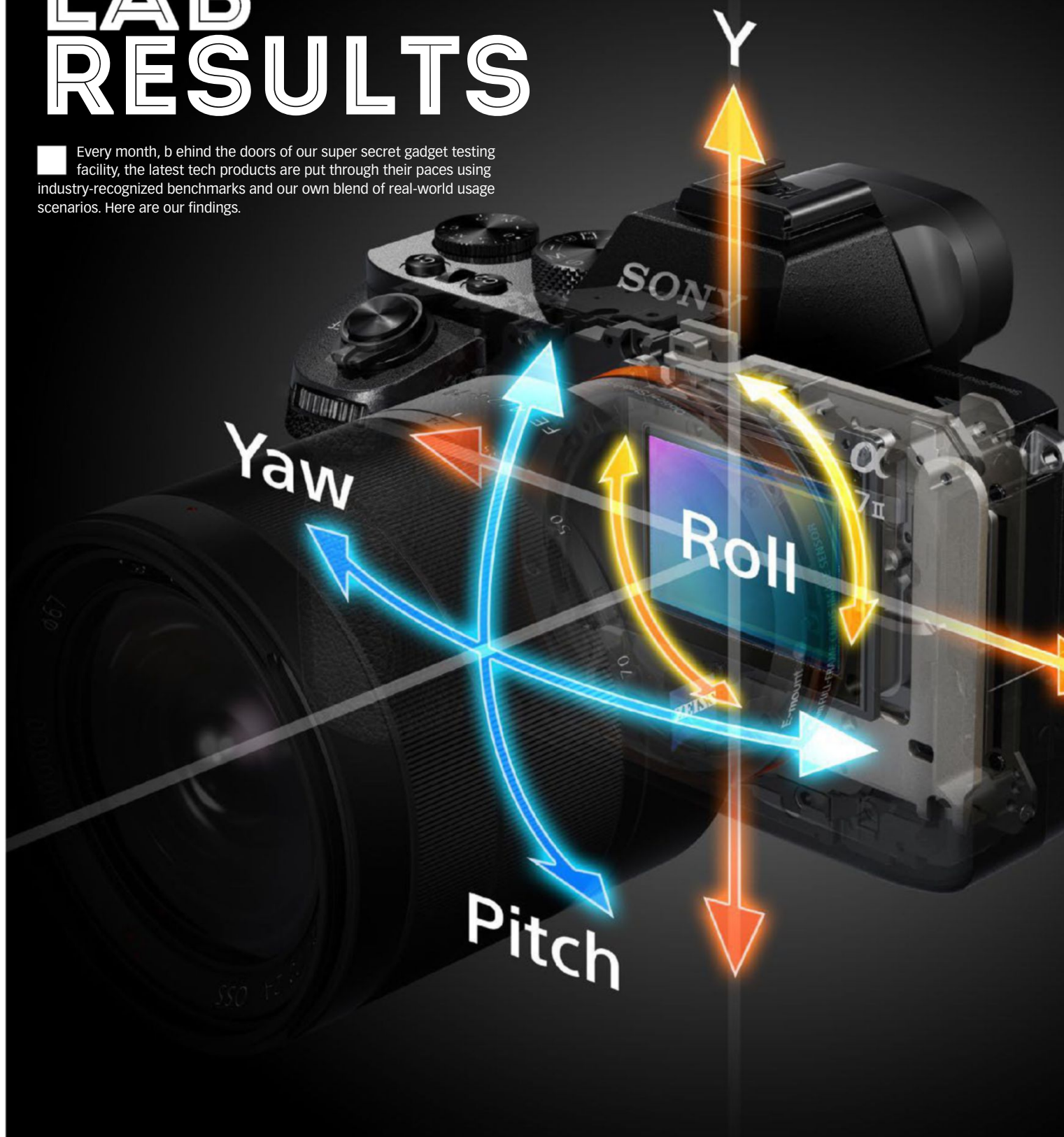
HAPPY MOBILE D-LITE

// PhP 2,699

Very much affordable, the Happy Mobile D-Lite houses a 1.3GHz dual-core processor, 1GB RAM, and 4GB internal memory. It runs on Android 4.4 KitKat, and is a definite stunner with its 4-inch IPS display, impressive design, and premium feel. www.facebook.com/HappyMobilePhilippines

LAB RESULTS

Every month, behind the doors of our super secret gadget testing facility, the latest tech products are put through their paces using industry-recognized benchmarks and our own blend of real-world usage scenarios. Here are our findings.



THE AWARDS



10



9/9.5



8/8.5



Best Performance



Best Value

Review scores of 8/8.5 are awarded the Silver Award. 9/9.5 get the Gold. ONLY a perfect 10 wins our Platinum Award.



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AT A GLANCE

OS

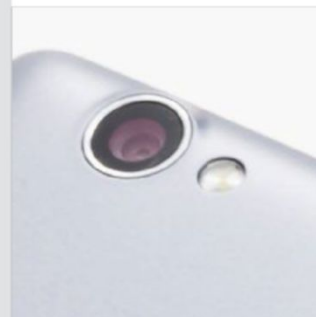
Android 5.1 Lollipop

Display4.5-inch IPS LCD
(854 x 480)**Processor**MediaTek 6582
(Quad-core, 1.3GHz)**Main Camera**

5-megapixel

Price

Php 3,999



The Cherry One's rear camera is nicely integrated into the phone's body with a minimal bump.

Cherry One

SETTING THE BAR

TAP FOR
WEBSITE

Android One was recently made official in the Philippines, and it aims to provide better mobile devices to Filipinos at a more reasonable price point. One of the first handsets released that sets the bar for Android One in the country is Cherry Mobile's Cherry One. Although Cherry Mobile seemed to be pumping out a lot of devices as of late, we can say that the Cherry One is special, as it comes straight from the brand's team-up with Google.

At first glance, the hardware that comes with Cherry One may not appear spectacular, but for a Php 3,999 price tag, its specs will do. It has a 4.5-inch display with an 854 x 450 resolution, which makes it convenient for one-handed use while still delivering a good avenue for multimedia.

On the outside, the phone comes with a matte plastic rear cover that allows for comfortable handling without slipping. Its body appears sturdy enough that it won't break easily even with a very tight grip.

Keep in mind that the major advantage of this handset lies in the software that it arrives with. It comes with the latest stock version of Android 5.1 out of the box, which is even ahead of Google's Nexus devices. The bloatware-free OS is easy to work with, as it showed no lags at all when switching from one app to another, and boot up was relatively speedy. Usage during various multimedia, gaming, and browsing was also lag-free. The Cherry One will also be receiving up to two years of software updates from Google.

Inside is a 1.3GHz quad-core MTK6582 processor with 1GB of RAM. Benchmark testing the Cherry One yielded scores of 20100 on AnTuTu and 5431 on Quadrant Standard. The bloatware-free OS compensates well for the hardware, which enables the phone to perform efficiently.

It comes with a 5-megapixel main camera with LED flash and a 2-megapixel front-facing

camera. The images taken using the Cherry One are satisfactory in a well-lit environment, especially if the photos will only be shared on various social networks. It struggles, however, to take decent photos under low light, but the outputs were still sufficient for photo sharing online.

Cherry One's 1780mAh battery may not be huge, but its optimized Lollipop OS and average-sized screen covered our daily usage on a single charge. Even with medium to heavy use, its battery juice was enough to last an entire day.

Despite not having phenomenal hardware, the Cherry One's fresh Android OS and budget-friendly price make it an easily likeable Android smartphone. If you're on a shoestring budget, but want a capable Android smartphone, the Cherry One is a strong candidate that you should consider.

by Katrina D. Canlas

CONCLUSION

The Cherry One arrives with the latest Android OS, which greatly makes up for what the device misses in the hardware department. Plus, it's super light on the wallet.

TESTED & RATED

8.0

/10

HWM
PHILIPPINES

MyPhone Uno

START OF SOMETHING GREAT

Android One has finally hit the Philippines, and we have one of the first smartphones of its kind in our labs. The MyPhone Uno is the company's first foray into Google's rising platform, combining the former's marketing prowess with the latter's strict blueprints, which will hopefully be a recipe for success.

For the uninitiated, having an Android One phone means you'll be getting a vanilla Android OS. This, in turn, rids the Google-certified handset of all bloatware and interface skins that would otherwise slow down your device. In addition, you'll get first dibs on firmware updates as they're released. In this case, the Uno is offering you Android the way it's meant to be experienced, along with an affordable price tag akin to entry-level MyPhone models.

The immediate reaction you'll get while holding the Uno is that it's indeed from MyPhone. The body is a pleasure to hold and fits

snuggly in one's hand, just like MyPhone's Rio series. Similar to their other entry-level phones, however, the display quality leaves us wanting more. Its 854 x 480-pixel resolution doesn't give the Lollipop look justice, and holds back the joy of watching videos on the 4.5-inch screen.

Speaking of Lollipop, this smartphone is one of the very first in the world to come equipped with version 5.1 right off the bat (yes, even ahead of the newest Nexus devices). The updated OS, which is pretty much the highlight of the Uno, works like a charm the moment you turn it on. Transitions between apps and notifications are silky smooth, and satisfactory scores of 19767 on AnTuTu and 5469 on Quadrant prove that it's no fluke. Having used the Uno extensively during our time with it, we can also safely say that the battery life is impressive, able to last over a day with moderate to heavy usage.

On the other hand, there are

some minor quirks to consider. For one, the Uno comes with only 4GB of internal storage. That's fine for an entry-level device, and there's also an 8GB microSD bundled with the phone, but it limits the number of app-based data you can store. Another underperformer is the camera, which produced less-than-stellar photos under weak lighting while focusing rather slowly. The drawbacks are expected at this level, so if the Uno is your first step into the world of Android, then you have nothing to worry about.

If you've been waiting for an authentic Android experience but couldn't afford or find yourself a Google Nexus device, then choosing the MyPhone Uno is a no-brainer. Sure, it lacks an HD display and high-performing camera, but the smooth interface and comfortable handling more than make up for them, especially at this price point.

by Marvin R. Velasco

AT A GLANCE

OS

Android 5.1 Lollipop

Display

4.5-inch IPS LCD
(854 x 480)

Processor

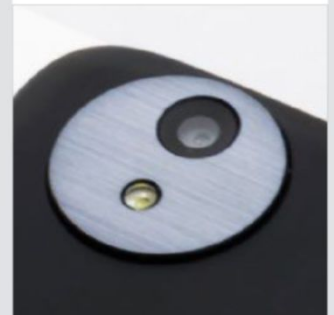
MediaTek 6582
(Quad-core, 1.3GHz)

Main Camera

5-megapixel

Price

Php 4,599



The main camera protrudes slightly from the rear, and has a brushed metal look around it.

CONCLUSION

If you've been waiting for an authentic Android experience but couldn't afford or find yourself a Google Nexus device, then choosing the MyPhone Uno is a no-brainer.



TAP FOR
WEBSITE

TESTED & RATED

8.0/10

HWM
PHILIPPINES



AT A GLANCE

OS

Android 4.4.4 KitKat with HTC Sense 6

Display

5.2-inch Super LCD 3 (1920 x 1080)

Processor

Qualcomm Snapdragon 801 (Quad-core, 2.3GHz)

Main Camera

13-megapixel

Price

Inquire



As a water-resistant phone, the Desire Eye is mostly sealed so access to the SIM slots require some effort.

HTC Desire Eye

MISSION: SELFIE

TAP FOR
WEBSITE

HTC has been experimenting with mobile photography quite a bit recently. Last year's One (M8) was touted as the world's first smartphone with a secondary camera to capture depth information. Later in the year, they ditched their UltraPixel sensor for a 13-megapixel camera in the Butterfly 2 while retaining the Duo Camera setup for much greater image quality. Their latest experiment, the Desire Eye, features two 13-megapixel cameras – front and back – to cater to the selfie generation.

As more of a fun lifestyle device, the Desire Eye is made entirely of plastic, which may look like a budget phone at first glance. Its matte texture, however, offers a good grip, and like the Butterfly 2, is dust- and water-resistant with the same open port design, so you don't have to fumble with flaps. With an IP57 rating, it should survive being submerged up to one meter for up to 30 minutes, but

HTC doesn't recommend actually using the phone underwater as it is not designed for such use. The Desire Eye comes at a rather unconventional screen size at 5.2 inches with a Full HD 1080p resolution. We must say that it's very bright, though, even when set to the minimum level. Unlike the front-facing grill-like speakers on the One (M8), the Desire Eye has slimmer and more recessed BoomSound speakers on the top and bottom of the display. Software-wise, the Desire Eye is loaded with Android 4.4.4 KitKat and Sense 6.

So what's really new with the Desire Eye? Besides the obvious bump in megapixel count for the front-facing camera, it is the first product to ship with HTC's Eye Experience app, which consists of various camera functions. Tackling the more obvious functions first, the Desire Eye now has many automatic functions for taking selfies. The Desire Eye offers a Live Makeup mode where you can

see and adjust the smoothing effect in real time before you take the shot. Both cameras aren't exactly the same. The rear camera features an f/2.0, 28mm wide-angle lens, while the front camera has an f/2.2 and wider 22mm lens to accommodate group selfies.

Battery life in the Desire Eye was pretty decent, and it lasted more than seven and a half hours in our tests. Performance and user experience is similar to previous HTC phones and, in a nutshell, seems like a combination of the plastic One (E8) and the ruggedness of the Butterfly 2, with the addition of a better front camera and Eye Experience app for the selfie-focused consumer. The HTC Desire Eye finds itself in stiff competition with the recently available Oppo N3, which boasts a motorized 16-megapixel camera and an even larger 5.5-inch display.

by *Cookie Monster*

CONCLUSION

The HTC Desire Eye smartphone is sturdy and waterproof with great handling – an all-round device that will also take high-quality selfies with its dual 13-megapixel cameras.

TESTED & RATED

8.5_{/10}

HWM
PHILIPPINES

Microsoft Lumia 535

NEW SMARTPHONE AT A CHEAP PRICE

A lot of consumers wish to have a flagship smartphone, but often don't have the means to get it. This is why affordability becomes a very important factor when consumers decide to look for the perfect smartphone. Looking bright and colorful, the Microsoft Lumia 535 offers that one go-to device for those who want to own a smartphone that is comparable to the latest flagships at a very cheap price. It is the first Lumia phone without the Nokia branding, available for only PHP 5,990 SRP.

The new Lumia 535 Dual SIM offers a 5-inch IPS LCD display with Corning's Gorilla Glass 3 protection, making the screen resilient to scratches. The screen is large for an affordable smartphone, which is great, but we were disappointed once we started using the messaging app. We could hardly type a sentence without missing a few letters. It could be a flaw on the touch sensitivity of the screen or the spacing of letters

and punctuation marks on the Lumia on-screen keyboard. Either way, it was a hurdle.

The back cover of the Lumia 535 is very much cheery and stylish. It is interchangeable so you can match it with the color of your outfit. You can choose from orange, green, white, black, gray, and blue. We had the orange one, and though it may seem a little too loud, it is playful enough for us to have fun and enjoy it.

It sports a 5-megapixel rear camera, which is acceptable for a smartphone with a price near six thousand pesos. We captured some great shots in well-lit environments, but in comparison to other smartphones that are equipped with a similar camera sensor, pictures taken under low-light conditions came out somewhat grainy. The front camera, however, was a joy to use. Overall, we had a great experience with the Lumia 535 cameras, especially during the day.

The Microsoft Lumia 535 is

powered by a 1.2GHz quad-core Qualcomm Snapdragon 200 processor and runs on the Windows Phone 8.1 operating system. It is built with 1GB RAM, 8GB internal memory, and 15GB free OneDrive cloud storage. In terms of performance, we were quite satisfied, but not overall impressed. Instead, the unit we tested showed off its prowess in terms of battery life. With light usage, the Lumia 535 lasted more than two days, and with moderate to heavy usage, it was able to last a full working day.

Unlike Android devices, applications on Windows Phones tend to be limited. We were able to explore the services on the Microsoft Lumia 535 as much as we could, but we still found it lacking. Overall, the Lumia 535 may have some drawbacks, but its affordability and cheery design still send out a colorful vibe to anyone interested in owning a new smartphone.

by Ashley Lucas

AT A GLANCE

OS

Windows Phone 8.1

Display

5-inch IPS LCD
(960 x 540)

Processor

Qualcomm Snapdragon 200 (Quad-core, 1.2GHz)

Main Camera

5-megapixel

Price

Php 5,990



The Lumia 535's back cover is interchangeable, so you can change it depending on the color you prefer.

CONCLUSION

The Microsoft Lumia 535 has its flaws and drawbacks, but its affordability and cheery design send out a colorful vibe to anyone interested in owning a new smartphone.



TAP FOR
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TESTED & RATED

7.5_{/10}

HWM
PHILIPPINES



Sony Xperia Z3 Tablet Compact

A PORTABLE AND WATERPROOF COMPANION

TAP FOR
WEBSITE



Sony's Xperia Z3 Tablet Compact is the company's first foray into the 8-inch tablet category, putting it in the same bracket as the Apple iPad mini 3, LG G Pad 8.3, and Samsung Galaxy Tab S 8.4. Sony's OmniBalance design of the Xperia Z range has remained mostly unchanged since its inception. Fortunately, it's a pretty good look, and the Z3 Tablet Compact carries it well.

At just 6.4mm, the Z3 Tablet Compact is remarkably skinny. But while its slender size does make it look and feel very premium, it does feel slightly fragile, and you definitely don't want to accidentally sit on it. The tablet is light, and can easily be held one-handed for an extended period of time, as it weighs just 270g. Sony has been able to keep the weight down by reducing the amount of metal in the build. The Z3 tablet also loses the glass rear of its smaller smartphone siblings, in favor of a matte, textured plastic back. Like

all of Sony's Xperia Z range, the Z3 tablet is completely dust- and waterproof, and is rated IP65/68.

The Z3 Tablet Compact's 8-inch display has a 16:10 aspect ratio, which makes it perfect for watching movies in landscape orientation. Content, though, can look slightly stretched in portrait mode. Unfortunately, camera performance on the tablet is quite poor, with the 8-megapixel rear camera a big step down from the 20.7-megapixel shooters you'll find on the Z3 phones. Additionally, like the iPad mini, it doesn't have an LED flash, so you'll have to provide your own lighting. The 2-megapixel front-facing camera isn't great, either. The Z3 tablet runs on Android 4.4.2 KitKat and includes Sony's usual enhancements and add-ons. Sony's standout feature is Remote Play, which links with your Sony Playstation 4 via Wi-Fi and lets you use the tablet as a remote display.

The tablet is powered by a Qualcomm Snapdragon 801

processor and 3GB RAM. In our benchmark tests, it performed very well, outscoring the iPad mini 3 and Galaxy Tab S 8.4 on most tests. Battery life was also excellent, with the Z3 tablet lasting over ten and a half hours on our video looping benchmark.

If you're in the market for a high-end 8-inch Android tablet right now, you should only be considering two choices, the Samsung Galaxy Tab S 8.4 and the Sony Xperia Z3 Tablet Compact. Between the two, the Tab S 8.4 has a slightly larger, higher-resolution screen and marginally longer battery life. In all other areas, the Z3 Tablet Compact beats it. It is fully waterproof so you don't have to worry about using it at the beach or pool. Finally, if you've got a Playstation 4, the choice should be obvious. The Z3 has great synergy with the PS4, and its 8-inch screen is just the right size for some in-bed gaming.

by James Lu

AT A GLANCE

OS

Android 4.4.2 KitKat

Display

8-inch TFT LCD
(1920 x 1200)

Processor

Qualcomm Snapdragon
801 (Quad-core, 2.5GHz)

Dimensions

213 x 124 x 6.4mm

Price

Php 31,990

At 6.4mm, the Z3 Tablet Compact is the thinnest 8-inch tablet available in the market right now.

CONCLUSION

The Sony Xperia Z3 Tablet Compact is probably the best 8-inch Android tablet available right now. It is very sleek, lightweight, powerful, and waterproof.

TESTED & RATED

9.0 /10

HWM
PHILIPPINES

Lenovo ThinkPad 8

HANDY LITTLE COMPUTER

Windows 8 devices are getting more compact every day. The latest Windows 8 trend is in 8-inch slates, like the Lenovo ThinkPad 8. This tablet is Lenovo's first take in the 8-inch foray for its business set.

This device is handy, since it is small enough to be held in one hand, while giving you the capability to carry Windows 8 wherever you go. For users with small hands, however, it may still require a little effort to have edge-to-edge reach with single-handed operation.

As a business product, the ThinkPad 8 exudes a premium build and finish. It comes with a machined aluminum shell that covers its rear. It has an anodized finish memorable of an iPad Air. To make it even better, it has an added dash of black paint. Running around its edges is a rubber material that provides better grip of the device.

The ThinkPad 8 has a quad-core Intel Z3770 Atom processor with 2GB of RAM, which gave a

decent result when we tested it. It has a good processor for everyday use and it can multitask well, but don't expect it to be a platform for serious graphics work or hardcore gaming.

Although it is power-packed, its small screen is not an ideal complement. The screen feels too small for some Windows applications and typing on its on-screen keyboard can be tedious. When it comes to multimedia use, specifically watching movies, this slate really delivers. Reading, viewing photos, and playing light games on it is fun, as well. It only lacks with the limited Windows 8 app library, which is leagues behind Android and iOS.

Testing its battery capacity, it ran out of juice after 401 minutes (6 hours and 41 minutes). Six and a half hours is decent, but most tablets can last better than that, especially those that run on Android or iOS.

The ThinkPad 8 has a 2-megapixel front-facing camera and an 8-megapixel rear camera.

The rear camera is a step up from the 5-megapixel shooter offered on the Lenovo Miix 2. Indoor photos look okay, but it is a little difficult working with its focus in a low-light environment. Sometimes, even with ample light, it has trouble in capturing fine details. Outdoor shots make it seem easier to work with its focus, but bright light appears washed out at times and shadows tend to get drowned out.

Video recording is also a hit or miss with its main camera. It has a hard time transitioning from light to dark scenes, which sometimes make videos appear darker than usual in between.

In the end, the ThinkPad 8 is a good business tablet with the looks and performance designed for the workplace. It may be rough around the edges, but since it's a first for Lenovo, we believe improvements are on the way.

by Katrina D. Canlas

AT A GLANCE

OS

Windows 8.1

Display

8.3-inch IPS LCD
(1920 x 1200)

Processor

Intel Atom Z3770
(Quad-core, 2.4GHz)

Weight

Approx. 430g

Price

Php 24,990



The tablet has a micro-HDMI port so you can connect it to a TV. Located beside it is a microUSB slot.

CONCLUSION

Though it has imperfections, the Lenovo ThinkPad 8 is a business tablet that offers a speedy chip and sharp screen that is worth the cash if you want a Windows 8 slate.



TESTED & RATED

8.0 /10

HWM
PHILIPPINES



AT A GLANCE

Mount

Sony E-mount

SensorFull-frame
Exmor CMOS**Resolution**

24.3-megapixel

Weight

556g (Body only)

Price

PhP 89,999 (Body only)



Having in-camera anti-shake on the Sony A7 II allows you to take handheld shots in low-light.

Sony A7 II

STEADY AS SHE GOES

The A7 was a groundbreaking camera as it was the first mirrorless system camera to feature a full-frame sensor. A solid camera that proved the concept was feasible, it laid the groundwork for the A7R, and later on, the A7S. Its direct successor, the new A7 II, has finally been released, and Sony extends the bar again by making it the first full-frame mirrorless camera to feature 5-axis in-camera image stabilization. With its introduction, the A7 II can now use just about any lens, even older manual lenses via adapters and still retain full image stabilization, in which Sony claims an equivalent to 4.5 stops of correction.

The A7 II comes just about a year after the launch of the A7, and while the overall design is largely similar, the new body is slightly wider and taller, and features an improved layout. The buttons on the back of the camera are slightly larger now, making them easier to

activate. The shutter button is also bigger, and more crucially, has been shifted further to the front, making it easier to reach. Everything is just better spaced, with the dials feeling more sensibly sized now. Even so, it is still one of the most compact full-frame ILCs around.

The menu system hasn't changed, though, with the exception of a few added movie options, as the A7 II now supports capture of up to 1920 x 1080 (60p) at a maximum bit-rate of 28Mbps in AVCHD and XAVC-S. More options for customization is something Sony has made an effort to implement here, as no less than 56 functions can be assigned to a total of ten programmable buttons.

The overall experience of shooting with the A7 II doesn't change from the original. Using longer telephoto lenses still feels a little unbalanced, but we do think it's a lot better with the new handgrip. Another thing we found was that the EVF can

be a little too dark at times, but that's an easy fix. As might be expected, the images from the A7 II do not vary too much from the original, though we do find that it handles noise slightly better. The 5-axis IS doesn't seem to be a major factor unless you're really unsteady or use a lot of manual lenses. In terms of effective resolution, the A7 II doesn't change much from the original, which is to say there's all the detail you would expect from a 24-megapixel camera. The bigger difference comes at the higher ISO settings, where the improved algorithms of the new model handle the color noise slightly better.

Is the difference enough to justify an upgrade if you already have any of the A7 cameras? Probably not. But if you're in the market for a full-frame camera or shoot in low light a lot, we'd definitely recommend you take a look at the A7 II.

by Marcus Wong

CONCLUSION

The image stabilization of the full-frame Sony A7 II is not that big of an upgrade over the already excellent A7, but thoughtful tweaks make the camera a joy to use.

TESTED & RATED

8.5

/10

HWM
PHILIPPINES

Gigabyte GeForce GTX 960 G1 Gaming

POWER-EFFICIENT GRAPHICS ACCELERATOR

Gigabyte sent us its newest Maxwell-based GeForce GTX 960 cards, the iterations of its G1 Gaming and WindForce 2X graphics cards. These cards are powered by NVIDIA's GM206 graphics processor and pack 2GB memory that runs at 1753MHz and transmits 128-bit data. The G1 Gaming has a 1241MHz core clock speed, while the WindForce has 1216MHz.

Both cards have one Dual-Link DVI-I, one Dual-Link DVI-D, one HDMI, and three DisplayPorts, which can support up to a four-monitor gaming setup. Both require two 6-pin external power connectors, and you can combine two GTX 960 cards in a multi-GPU SLI configuration. The G1 Gaming sports the WindForce 3X cooler, in which its black metal body cradles three uniquely crafted fans. The fan blades' design helps effectively dissipate heat by providing enhanced airflow to the heat sink, while an illuminated WindForce signature and fan

indicators that light up when in silent mode sit atop of the cooler. The WindForce 2X's cooler is made out of plastic with only two fans, but its fans are much larger than that of the G1 Gaming.

A massive heat sink hides behind the WindForce 3x, which has four 6mm copper heat pipes that directly touch the GPU, providing faster heat dispersion. The G1 Gaming comes with a black backplate, engraved with a G1 Gaming logo; this combination will undeniably make jaws drop. As for the WindForce 2X, its cooler is shorter than that of the WindForce 3X and only has three copper heat pipes.

To find out how these cards perform, we ran our usual benchmarks. Starting off with 3DMark 11, the G1 Gaming got 10594 on 720p and 3445 on 1080p, while its little brother got 10560 on 720p and 3434 on 1080p. On our Heaven Benchmark run, the G1 Gaming yield 57.3fps on 720p and 33.4fps on 1080p, while the

WindForce 2X got 57.1fps on 720p and 33.2fps on 1080p.

To strengthen the numbers given by the benchmarks, we tested them out with some recent game releases. First on our list was *Call of Duty: Advance Warfare*. We tweaked the anti-aliasing, but settings were on max. The G1 Gaming delivered 39fps on 1080p, one FPS higher than the WindForce 2X. After the futuristic warfare, we then pitted them against a multitude of orcs on *Middle-earth: Shadow of Mordor*. For this test, we set all settings on maximum. The G1 Gaming managed to hold an average of 31.5fps on 1080p, while its sibling fell two FPS behind.

Despite their low data interface and memory size, these GTX 960 cards prove that first impressions never last, because these cards can be on par with any same-tier graphics cards and even outperform some.

by Jasper Oregas

AT A GLANCE

GPU

GM206

GPU Clock

1241MHz (G1 Gaming),
1216MHz (WindForce 2X)

Memory

2GB

Connectors

2x DVI, HDMI,
3x DisplayPort

Price

PhP 16,550



Three uniquely crafted fans provide enhanced airflow to the heat sink, creating better heat dissipation.

CONCLUSION

Despite their low data interface and memory size, these GTX 960 cards prove that first impressions never last, and that they can even outperform some same-tier cards.

TESTED & RATED

8.0 /10

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ASUS Strix GeForce GTX 980

THE HOWL OF THE OWL

The ASUS Strix GeForce GTX 980 is one of, if not the most glorious cards out in the market. It is powered by NVIDIA's GM204 graphics processor, clocked at 1178MHz, boosting up to 1279MHz, with 4GB of GDDR5 memory that is rated at 1753MHz and transmits 256-bit data. For its display connectivity options, it has one DVI port, one HDMI port, and three DisplayPorts. The three DisplayPorts allow for a triple-monitor G-Sync surround setup. It requires one 8-pin and one 6-pin power connector. You can combine up to four GTX 980 cards in a multi-GPU SLI configuration.

Its cooler is entirely metal in matte black finish. An ASUS signature sits on the lower-left portion of its body and the Strix logo is placed near its power slots. The cooler cradles two 9.5cm fans that provide great airflow to the heat sink, resulting in much faster heat dispersion.

Hiding beneath its magnificent exterior is a

mammoth heat sink, which features five heat pipes that directly touch the GPU; this technology is called DirectCU II. The Strix drives this technology further by combining it with its 0dB-fan technology, giving you complete silence and faster heat dispersion while playing your favorite games. Another technology that makes it more desirable is the DIGI+ VRM. This technology minimizes the power noise by 30 percent and enhances power efficiency by 15 percent. This combination of technology improves the Strix's overall stability and longevity by 2.5 times.

We were thrilled to see how well it performs and to know if it's still triumphant when put under heavy load and a great deal of pressure. We started off with our benchmark routine; firing up 3DMark 11 was the first on our list. Running it on 720p was a walk in the park for ASUS' GTX 980, scoring 15699. On a 1080p setup, it still

performed really well, scoring 6142, which is higher than other same-tier graphics cards. After 3DMark 11, we ran Unigine's Heaven Benchmark. On a 1080p setup, it averaged 66.7fps easily and got a score of 1679.

We then pit it against some of the more recent games, the first trial being *Call of Duty: Advance Warfare*. All settings were put to maximum, while the anti-aliasing was set to Filmic SMAA T2x with 8x Supersampling on 1080p. It managed to hold an average of 55fps while maintaining the temperature around 65 degrees. The second game was *Middle-earth: Shadow of Mordor* under ultra and 1080p. It incredibly delivered an average of 91.5fps and an average of 37.3fps on 4K.

Dominating our scoreboards was easy for this impressive beast – the results speak for themselves. Grasp glory with the ASUS Strix GeForce GTX 980 or be left behind.

by Jasper Oregas

AT A GLANCE

GPU

GM204

GPU Clock

1178MHz,
1279MHz (Boost)

Memory

4GB GDDR5

Connectors

3x DisplayPort,
DVI, HDMI

Price

Php 33,820



Its cooling system, a combination of DirectCU II and 0dB fan technology, provides better heat dispersion.

CONCLUSION

The ASUS Strix GeForce GTX 980 can handle both 720p and 1080p effortlessly, and could even handle 4K settings at times. This is undoubtedly the epitome of high-end gaming.

TESTED & RATED

9.0 /10

HWM
PHILIPPINES

ASUS B85-PRO Gamer

THE LOW-COST GAMING MOTHERBOARD

The ASUS B85-PRO Gamer is an ATX motherboard packed with most of the needed technologies gamers eye for. It also has some of the famous ROG technology and its renowned durability. The B85-PRO Gamer is armed with the Intel B85 chipset and the LGA 1150 socket for 4th-generation Intel Haswell processors. It features an 8-phase VRM, which controls the power that makes it to the CPU socket. ASUS also equipped this entry-level motherboard with the SupremeFX 8-channel High Definition Audio Codec, which is a technology usually seen on high-end ROG motherboards, making it a stand out against other entry-level motherboards.

Another feature that would capture any gamer's attention is the Intel I217V Gigabit Ethernet with GameFirst II technology that gives priority to games over other inbound or outbound connections from other software or applications, giving your favorite online games a much

more reliable connection.

As for its expansion slots, it is built with a pair of PCIe x16 slots; the gray one is of PCIe Gen 3.0 standards, while the black is PCIe Gen 2.0. One drawback is the inability to support NVIDIA-SLI configurations, but it supports AMD CrossFireX technology up to quad CrossFireX setups. The other expansion slots are two PCIe 2.0 x1 slots and three PCI slots. In terms of storage, the B85-PRO Gamer has six SATA ports, four 6Gbps ports, and two 3Gbps ports. There are four USB 3.0/2.0 ports (two at the back panel and the other two at mid-board) and eight USB 2.0 ports (four at the back panel and four at mid-board).

To test its performance, we partnered it with our test bench components, a couple of Kingston HyperX Beast 4GB DDR3, a 256GB SSD from ADATA, and an Intel Core i5-4690, powered by an AcBel 1000W PSU. To fully test the motherboard's gaming

performance, we teamed it with a top-tier graphics solution, the ASUS Strix GeForce GTX 980.

First test was Cinebench R11.5, wherein it managed to get a score of 6.70. Since this motherboard boasts some gaming capabilities, we tested it out with some recent titles. First on our list was *Call of Duty: Advance Warfare*. Settings were put to maximum and the anti-aliasing was set to Filmic SMAA T2x with 8x Supersampling on 1080p. The combination of the ASUS GTX 980 and the B85-PRO Gamer was able to hold an average of 48.3fps. It also dominated our second test, which was *Middle-earth: Shadow of Mordor*, averaging 88.4fps on 1080p and 34.5fps on 4K.

Based on our test results and its features, the entry-level ASUS B85-PRO Gamer motherboard is good for gamers with a limited budget who still want to get the most out of their money.

by Jasper Oregas

AT A GLANCE

Socket
LGA 1150

Chipset
Intel B85

Storage
6x SATA ports
(4x 6Gbps, 2x 3Gbps)

Connectors
RGB, DVI, HDMI

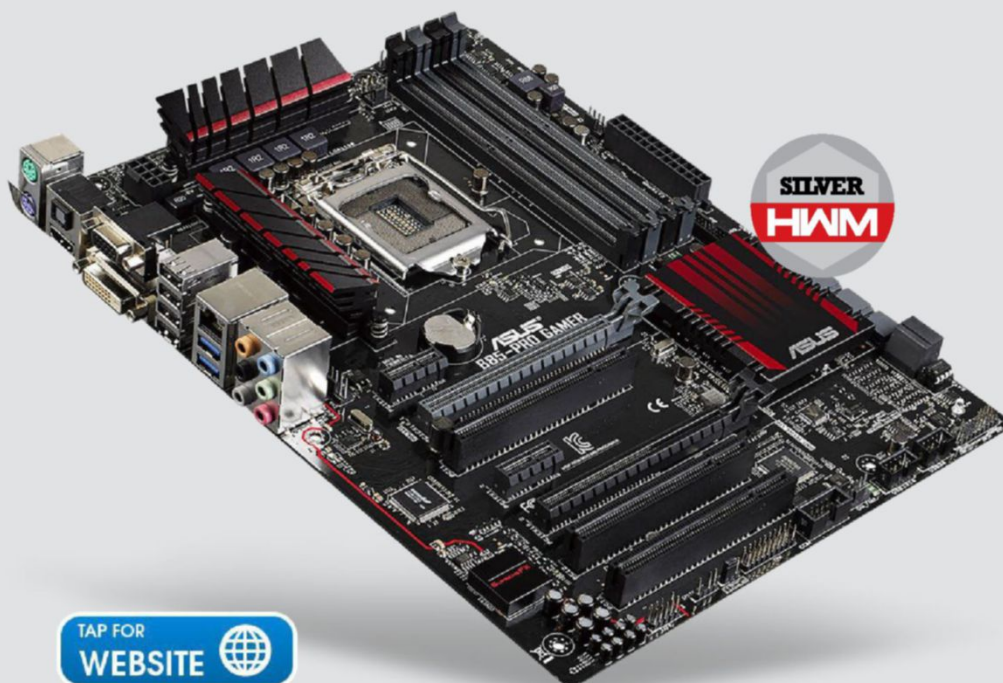
Price
Php 4,800



The intricately designed heat sinks provide faster heat dissipation. Its fins help with the cooling.

CONCLUSION

Based on our test results and its features, the entry-level ASUS B85-PRO Gamer motherboard is good for gamers with a limited budget who still want to get the most out of their money.



TAP FOR
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8.0 /10

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VS

LG UB980T

•

PANASONIC VIERA AX800

•

SAMSUNG HU8500

•

TOSHIBA PRO THEATER
L9450





BEYOND HIGH DEFINITION

Buying a 4K TV now makes more sense than previous years due to the maturing standards. And more are due to arrive in a few months' time after CES 2015. If you don't want to wait, or don't intend to spend top dollar for the latest and greatest, here are some of the current high-end LCD models that you can pick up in the store right now.

Text by *Ng Chong Seng*
Photography by *Darren Chang*
Photography Assistance by *Angela Guo*
Art Direction by *Ken Koh + Ian Chong*

LG UB980T

While OLED TVs have seen price drops recently, they remain too expensive for most people and are limited in variety compared to LCD TVs. This is why LG, who continues to invest heavily in OLED, still churns out new LED LCD TV series on a very frequent basis. Available in 65-, 79-, 84-, and 98-inch screen sizes, the UB980T is LG's flagship 4K TV, so naturally, it packs top-end specs and all the bells and whistles that the company can come out with, including an Ultra Clarity Index of 1300, sound co-developed with Harman Kardon, a maximum 5.2-channel, 120W speaker system, a built-in 8-megapixel camera, support for 4K HEVC 60p decoding, and WebOS.

Now, the UI refresh brought about by WebOS is obvious right from the get-go. From tuning the TV channels, connecting to your Wi-Fi network, to pairing with the LG Magic Remote, you're guided by an animated character named Bean Bird. All of a sudden, boring and technical configurations now seem fun and easy. And it goes deeper: There's also a new launcher, a left-to-right scrollable straight line menu that runs along the lower portion of the screen. The idea is to allow you to browse through service or content options without

having to navigate away from the existing view, not to mention letting you watch a show, play a game, or browse the Internet while searching or downloading other content at the same time.

WebOS will also know when you plug in an external device and recognize what kind of device it is, and then pops up a menu with all the relevant options. And there's a Live Menu with channel and recording options that you can open and keep within easy reach while watching TV. The ability to resume playback (say, of a YouTube video) after you've switched inputs and come back to it is also delightful. All in all, even as a 1.0 release, we already like how WebOS has panned out on LG TVs. We're excited to see how this year's WebOS 2.0-based TVs fare.

Design-wise, we're fans of LG's hardy "stable screen," though not so much of the protruding stand that runs the wide of the panel.

Connectivity-wise, you're pretty much covered by four HDMI ports (of which three support HDMI 2.0) and three USB ports. Along with support for Intel WiDi, Miracast, and MHL, you've got all the tools to get content on your mobile device onto the big screen at your disposal.

+
Refreshing WebOS UI. Sound designed by Harman Kardon.

—
Occasional UI sluggishness. Few rough edges in WebOS 1.0.

TAP FOR
WEBSITE 



AT A GLANCE

HDMI Ports
4

3D
Passive 3D

Built-in Camera
Yes

Price
Php 249,990 (65 inches)



It has a front-facing speaker system that sounded pretty good.



The LG UB980T TV has a built-in pop-up camera.



The Magic Remote offers various control modes.

PANASONIC VIERA AX800

In 2014, Panasonic introduced the Life+ Screen category into its TV lineup, reserved for its higher-end models that typically come with better image quality and more premium design such as the AX800.

Taking center stage here is My Home Screen, which as its name implies, is a user-customizable home screen for your apps and content. It's also capable of giving you new content recommendations and lets you search for content using voice. And through the clever use of the built-in camera and proximity sensor, the screen can pop up information (e.g., time, notifications, weather) automatically when it detects you're near. Coupled with things like a media player that supports a variety of formats (including RMVB), easy mirroring of smartphone or tablet images onto the screen, DLNA support, and built-in Wi-Fi, Panasonic high-end TVs are every bit as smart as those from the two Korean giants. And for what it's worth, the AX800 has a dual-core processor to keep operations snappy.

Of course, for a TV, image quality is still the most important factor. Panasonic has abandoned the plasma technology in 2013, and the AX800 (available

in 58- and 65-inch screen sizes) is one of the first results of the company's renewed focus. Two key features here are the Studio Master Color panel and Studio Master Drive, which Panasonic says enable the TV to reproduce deep blacks and a wide color gamut. Aided by Panasonic's Local Dimming Pro tech, the company is gunning for a plasma-like performance on an LCD TV. We shall see if it succeeds in the coming pages.

For those interested in the nitty-gritty, the AX800 has a HDMI 2.0 port that supports 4K 60/50p input. HDCP 2.2 and HEVC decoding, which are standard features found on 4K TVs launched in 2014, are also onboard. If you're looking for standout differences, then know that the AX800 is THX 4K-certified and has a DisplayPort terminal.

The AX800 is also a 3D TV. 3D is a less prominently advertised feature these days, but there's also no denying that 3D content is much easier to get than 4K content.

For the most part, however, active 3D on a 4K panel doesn't offer much of a resolution improvement over active 3D on a 1080p set. If you're a fan of both 4K and 3D, we recommend that you take a look at LG's 4K TVs that use passive 3D.



Good picture presets. Suited for both average consumers and professionals.



Super-heavy stand. Only one 4K 50/60p-capable HDMI input.



AT A GLANCE

HDMI Ports

4

3D

Passive 3D

Built-in Camera

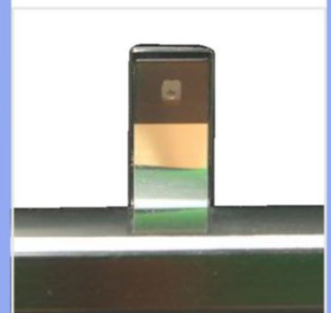
Yes

Price

US\$ 3,999.99 (65 inches)



Only one of its four HDMI ports supports 4K 60/50p input.



There's an integrated Full HD camera on the TV.



The remote has big buttons and a giant touchpad.

SAMSUNG HU8500

While Samsung has reserved its best technologies for its flagship HU9000 curved TV, the HU8500 (available in 48-, 55-, 65-, and 85-inch screen sizes) is still very much a high-end TV, sporting features like a Clear Motion Rate of 1000 (it's a 100Hz panel), a new local dimming method called UHD Dimming, a quad-core processor to ensure operation smoothness, and a built-in DVB-T2 tuner for tuning in to digital TV broadcast. But unlike the HU9000, the HU8500 lacks a built-in camera. Design-wise, we like that Samsung didn't try to be too fancy, and has gone for a simple brushed metal stand (non-swivel, though) and a thin metal trim around the frame of the TV. The focus is on the giant panel, and rightly so.

Speaking of future-proofing, arguably our favorite feature of the HU8500 (in fact, for all of Samsung's 4K TVs) is its ability to upgrade to the latest hardware (sans the panel, of course) and software simply by plugging in an external box that Samsung calls the One Connect box or Evolution Kit down the road. With this upgrade path, your investment will not become obsolete as fast compared to other TVs. That said, it's not as if the HU8500 is lacking anything. Out of the box, the

HU8500 already supports standards like HEVC, HDMI 2.0, MHL 3.0, and HDCP 2.2.

Samsung's 2014 Smart Control remote connects to the TV via Bluetooth, and is delightful to use. We find the touchpad handy for scrolling webpages. And even for menus that don't support it, there are arrow keys to fall back on (or you can just use the standard remote).

On the UI front, Samsung continues to improve its Smart Hub interface, and this version has a new Multimedia panel that combines the previous Photo, Video, Music, and Social panels. Compared to LG's generous use of animations, it can still look a tad intimidating, especially to non-advanced users.

Another feature we like on the Samsung HU8500 is the Multi-Link Screen, a contextual multitasking mode that lets you split the screen real estate, so you can do things like having live TV on one half of the screen and contextual search results on the web browser, relevant

YouTube video content, or a compatible app up on the other half at the same time. A Soccer mode that allows you to enlarge a selected area on the screen is also pretty nifty, but we aren't fans of the pumped up colors and contrast this mode brings.



Good set of smart TV features. Competitively priced.



Doesn't sport all of Samsung's top-end hardware features.

TAP FOR

WEBSITE



AT A GLANCE

HDMI Ports

4

3D

Passive 3D

Built-in Camera

No

Price

US\$ 4,499 (65 inches)



You can upgrade the TV's hardware if you get a One Connect box.



For Skype video calls, you can get the optional VG-STC4000 camera.



The remote has four direction keys and a touchpad.

TOSHIBA PRO THEATER L9450

To ensure that smart TVs remain easy to use, TV manufacturers have been sweating the user interface and user experience details in the last few years. We saw LG turning to WebOS in 2014 and Samsung's continued efforts to refine its Smart Hub interface. If you aren't a fan of either, Toshiba's Android approach provides another credible alternative.

Starting with the L4300 series in 2013 that came with Android 4.2 Jelly Bean, 2014 is the second year Toshiba is using Android as a smart TV platform for its TVs. In fact, the integration has now come to the Japanese company's 4K TV lineup, like the L9450 series we have here. Regardless of the Android version (this time, it's Android 4.4), the appeal is the same, and that is you get to enjoy the vast number of apps (including games) on the Google Play store on a big-screen TV. The only gripe we have here is that one can only download free apps, and not pay for apps through the TV. Otherwise, it's a very familiar environment that Android mobile users are accustomed to.

Of course, being Toshiba's flagship 4K TV, the L9450 (available in 50-, 65-, and 84-inch screen sizes) is packed with sophisticated hardware components

and software features, including the company's third-generation Cevo 4K video processing engine for natural color reproduction and Full HD-to-4K upscaling, Active Motion & Resolution Plus 3100 that reduces motion blur during fast-moving sequences, DVB-T2 support for digital TV broadcasting, HDMI 2.0, screen mirroring, and a Football mode that attempts to render smoother footage. Sound isn't neglected

either, and the 50- and 65-inch L9450 sport a compact "Labyrinth" speaker system capable of 30W of audio output. The Labyrinth system isn't required on the giant 84-inch model, as its 40W system already goes very loud.

Knowing that most people don't tweak or calibrate their TVs, the L9450 also incorporates two features – Intelligent Scene Optimizer and Intelligent Auto View – to ensure that you always get the best possible image quality. The former basically detects the content

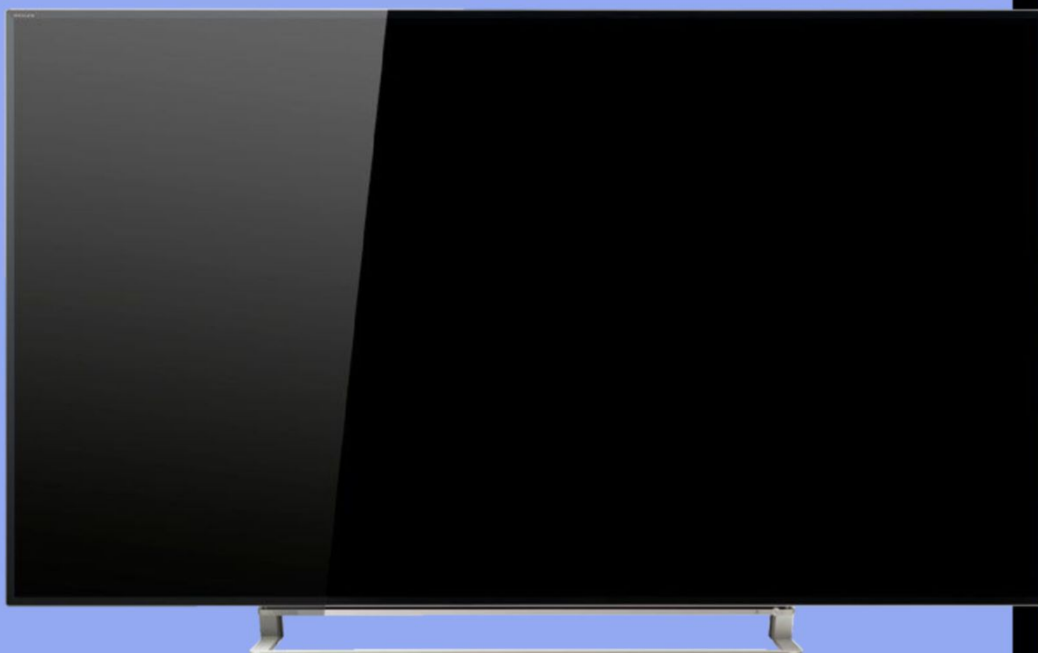
and input source to intelligently adjust picture and sound settings, while the latter analyzes signal and ambient lighting conditions to fine-tune the color management system automatically. Oh, before we forget, the Toshiba Pro Theater L9450 is the only TV here that doesn't do 3D.



Easy to expand functionality through Android apps.



No built-in camera. Doesn't support 3D.



AT A GLANCE

HDMI Ports

3

3D

No

Built-in Camera

No

Price

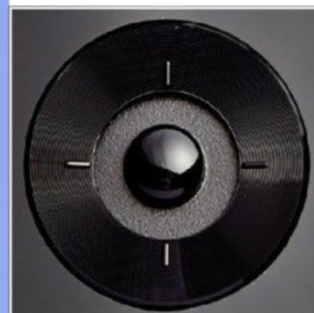
Inquire



The L9450 has three HDMI 2.0 ports at the side.



The L9450's stand is easy to assemble, and it looks good.



The key feature on this second remote is the trackpoint stick.

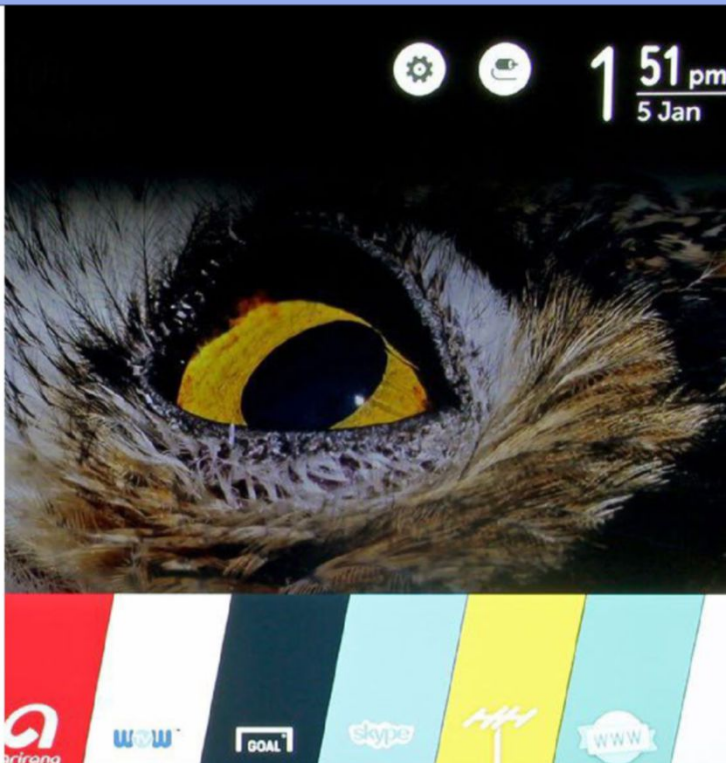
LG UB980T

Decked with the best technologies that LG has to offer, the UB980T's mostly excellent image quality came as no surprise to us. The IPS panel went pretty bright in our tests, and that bodes well if you're the kind who enjoys plenty of sunlight in the living room. But be careful of positioning to avoid reflections.

With over 8 million pixels, the UB980T shone when fed with properly done 4K content. Case in point: The sharp footage and natural-looking colors of the dishes in the *Food Odyssey* 4K documentary that came in this 500GB hard drive, which LG used to give to buyers of select 4K TV models, couldn't be more lifelike. *The Wolverine* movie (also in the hard drive) hardly put a foot wrong, as well, and to quote our own notes, "the red strands of Yukio's hair were impeccably rendered."

With plenty of details, depth, and sharpness, 3D images also looked amazing on this passive 3D TV. If you love watching 3D content, the UB980T is the TV to get. Coupled with the 90W, 5.2-channel front speakers of our 79-inch test unit, we truly had a cinema-like experience.

That said, the UB980T wasn't without faults. Comparing out-of-the-box performance, we found colors on the UB980T a tad muted than those on the Samsung HU8500. This is largely due to the IPS panel LG uses, which, although improves viewing angles, also makes colors "pop" less than rival panels. That said, the TV offers plenty of image controls (including a 20-point white balance control), so advanced users can tweak to their heart's content. For the average user, the ISF Expert 1 mode is a good preset for critical viewing; and it gave us accurate colors from the get-go. Unfortunately, the dreaded backlight blooming was present across all LED Local Dimming settings, but we managed to lessen the effect by lowering the backlight intensity. Lastly, resolution in fast-moving scenes remained good with TruMotion engaged.



The new launcher lets you browse without turning away from the existing view.



The colorful and bright image makes this TV great for daytime viewing.

PANASONIC VIERA AX800

The AX800 exhibited very good color accuracy out of the box, helped no doubt by its excellent grayscale tracking. Panasonic has apparently designed this TV for critical watching, which is not hard to deduce from the pro-sounding picture modes like Cinema, THX (Cinema and Bright Room), Professional 1, and Professional 2. The THX modes have a gamma response of about 2.2, the widely used standard for TV and film. The two Professional modes went close to 2.4, and both are excellent choices if you prefer a more contrasty image. Either way, the AX800 has a good suite of color management controls (including ISF controls), so it's not hard for well-equipped users to get near reference results.

In terms of black level response, the AX800's performance was as good as the Samsung HU8500's, especially when the lowest Adaptive Backlight Control (which controls local dimming) was engaged. A letterbox dimming mode, akin to the Cinema Black setting we saw on Samsung's flagship curved TV, but not on the HU8500, darkened the top and black bars even further.

All in all, image quality-wise, the AX800 hardly faltered regardless of the content we threw at it. *Superman Returns* still looked mighty good after upscaling, and the slight noise we observed in some dark scenes are inherent of the movie rather than the fault of the TV. There was a bit of dirty screen effect, though we think most people won't notice it.

Interestingly, the TV has a "1080p Pixel by 4pixels" mode for making 1080p images look good on a 4K display, and we found differences (vs. upscaling) to be minor after staring at the Blu-ray version of *Harry Potter and the Deathly Hallows: Part 2* for a good hour. Motion resolution was also high, thanks to Panasonic's well-implemented frame creation tech; and 3D images looked vibrant, and suffered slightly less crosstalk than the Samsung set.



Tons of professional controls will delight advanced users.



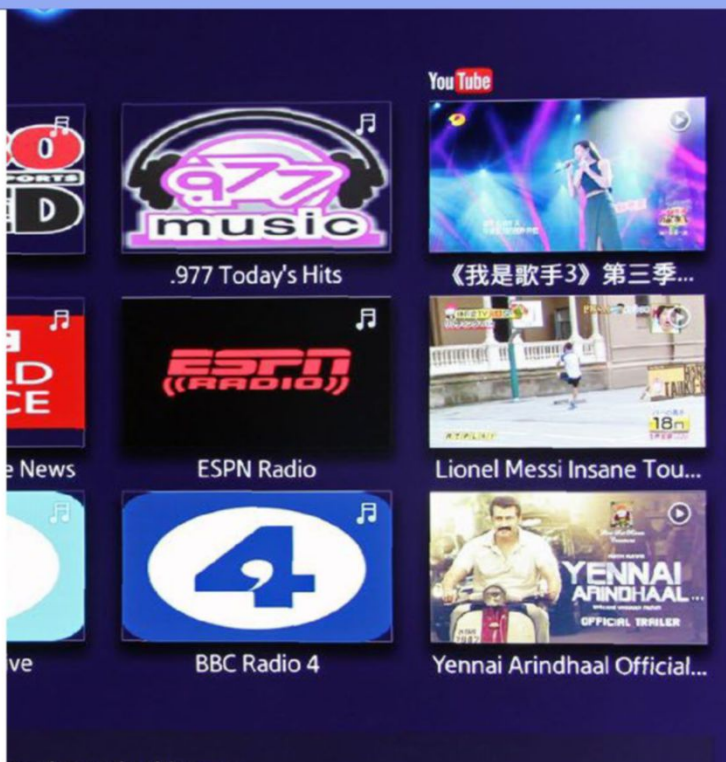
Minute banding aside, the AX800 has excellent upscaling and black level response.

SAMSUNG HU8500

At a viewing distance of 1.5m, it was hard not to be impressed by the big screen and the boatloads of details that the HU8500 brought. Even though the HU8500 didn't come with the PurColor and Auto Depth Enhancer technologies like the curved HU9000, the sense of 3D-ness was very much present in the *Grand Canyon Adventure*, a 4K documentary that was on the Samsung UHD Video Pack (basically a hard drive preloaded with 4K material). In fact, using just the Standard picture mode and without doing any kind of calibration, we found images to exhibit just the right amount of "pop."

The HU8500 also excelled when we switched to 1080p content. Even though it had been upscaled, details in the Blu-ray version of *Skyfall* still looked super-sharp. We also didn't experience any judder for 1080p24 2D material. Although the HU8500's local dimming method relied on fewer zones than the curved HU9000, we found the former's backlight control to work well across different types of materials. Sure, during low APL scenes in *The Dark Knight*, its black level performance, while good, was still no match for OLED TVs, but in movies with primarily high APL scenes and bright colors, it was capable of the brightest whites. The TV also exhibited very good motion clarity, thanks to effective black frame insertion implementation; even with the LED Clear Motion setting turned on, there was hardly any flicker. Lastly, 3D image brightness remained high, and the slight crosstalk of the active 3D system didn't ruin the viewing experience.

For audio, the small front-firing speakers on the TV's cabinet actually did quite a good job, as we could make out the many multi-directional audio moments in the *Star Trek Into Darkness* movie. The HU8500 also incorporates a Dolby MS11 multi-stream decoder that supports decoding of many of today's popular audio formats.



The streamlined Smart Hub UI makes finding what you want easier.



The colorful and bright image make this TV great for daytime viewing.

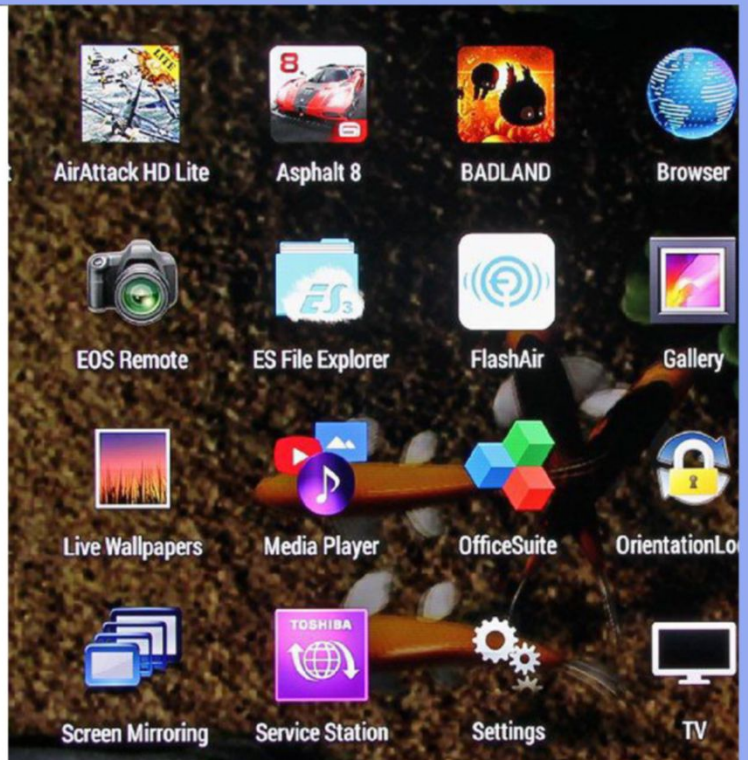
TOSHIBA PRO THEATER L9450

Interestingly, only the 50- and 65-inch L9450 use a wide gamut panel (the latter is the one we tested), which Toshiba says sport 14% wider color gamut than its 2013 lineup. Also, these two smaller models' panels go up to 75% brighter than last year's model, thanks to the use of direct LED backlighting with local dimming areas. The ginormous 84-inch model, on the other hand, uses an LED edge-lit backlight unit, instead. So buyers, beware.

We observed wide viewing angles and accurate colors on the L9450. Like the LG UB980T, colors were well-saturated but not crazily vibrant out of the box. Contrast, while good, didn't go as high as the Samsung HU8500. For an LED LCD TV, it exhibited high brightness (good news for those with bright rooms) and there wasn't much of a dirty screen effect. We attribute these to the new backlighting system and the pixel structure tweaks that let more light comes through.

The L9450 also had a decent showing when it came to black level response. Sure, the Panasonic and Samsung sets still fared better, but the L9450 wasn't far off. The difference was more apparent in a dark environment, as we saw more backlight transitions on the L9450. Reducing the backlight got rid of many of the distractions, but advanced users would not be pleased by the crushed shadow details.

Of course, with a 4K panel, the L9450 was capable of showing tons of details when fed with proper 4K signals. The Cevo 4K engine worked rather well, upscaling 1080p content to pseudo-4K convincingly enough. Motion resolution was noted to be very good, and credit for this has to go to the Active Motion & Resolution Plus tech. It's hard to decipher what the AMR+ 3100 spec really means, other than the fact that it plays around with the refresh rate (likely 100Hz natively) and the backlight system to produce smooth, high-res images during motion.

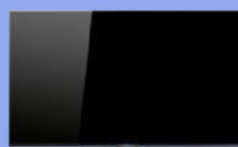


The biggest draw of running Android OS? Apps, of course!



We applaud the L9450 for its bright picture, saturated colors, and clear sound from the Labyrinth speakers.

T E S T - SPECIFICATIONS



MODEL	LG UB980T	PANASONIC AX800	SAMSUNG HU8500	TOSHIBA L9450
TV TYPE	LED LCD	LED LCD	LED LCD	LED LCD
BACKLIGHT TYPE	Edge-lit with local dimming	Edge-lit with local dimming	Edge-lit with local dimming	Direct-lit with local dimming
RESOLUTION	4K (2160p)	4K (2160p)	4K (2160p)	4K (2160p)
REFRESH RATE	UCI 1300	2000Hz BLS IFC	CMR 1000	AMR+ 3100
SPEAKER OUTPUT	70W	18W	60W	30W
SMART TV	Yes	Yes	Yes	Yes
PLATFORM	LG WebOS	Panasonic Life+ Screen	Samsung Smart Hub	Android 4.4.2 KitKat
BUILT-IN CAMERA	Yes	Yes	No	No
3D SUPPORT	Passive	Active	Active	No
DVB-T2	Yes	Yes	Yes	Yes
HDMI PORTS	4	4 (1 supports 4K 60/50p)	4	3
DISPLAYPORT	No	1	No	No
USB PORTS	3	3	3	3
POWER CONSUMPTION	N/A	289W	246W	429W
DIMENSIONS (WITH STAND)	1560 x 884 x 264mm	1466 x 887 x 368mm	1449.3 x 294.9 x 873.5mm	1461 x 896 x 304mm
WEIGHT (WITH STAND)	39.9kg	59kg	28.4kg	26.5kg
PRICE (65-INCH)	PhP 249,990	US\$ 3,999.99	US\$ 4,499	Inquire

AND THE BEST FLATSCREEN 4K TV IS...



SAMSUNG HU8500

Let's get this straight: There's really no perfect 4K TV at the moment. We've given the nod to the Samsung HU8500 (the one we tested was the 65-inch UA65HU8500KXXS) simply because it made the fewest mistakes. In short, we noted excellent upscaling, very good black level response, and a good set of smart TV features. The pretty HU8500's ability to upgrade its hardware shouldn't be ignored, too. The Panasonic AX800's image quality is equally good, but its UI is beginning to look dated and its speakers are a tad weak. The LG UB980T is also a good TV, especially for daylight viewing, and it has the best 3D performance. Its slightly weaker black levels and backlight control are what held it back. If you don't need 3D or prefer an Android UI, the Toshiba L9450 is worth considering. It has very decent image quality, though the UI is a bit clunky. For non-hardcore users, its sensible price tag is another big draw.

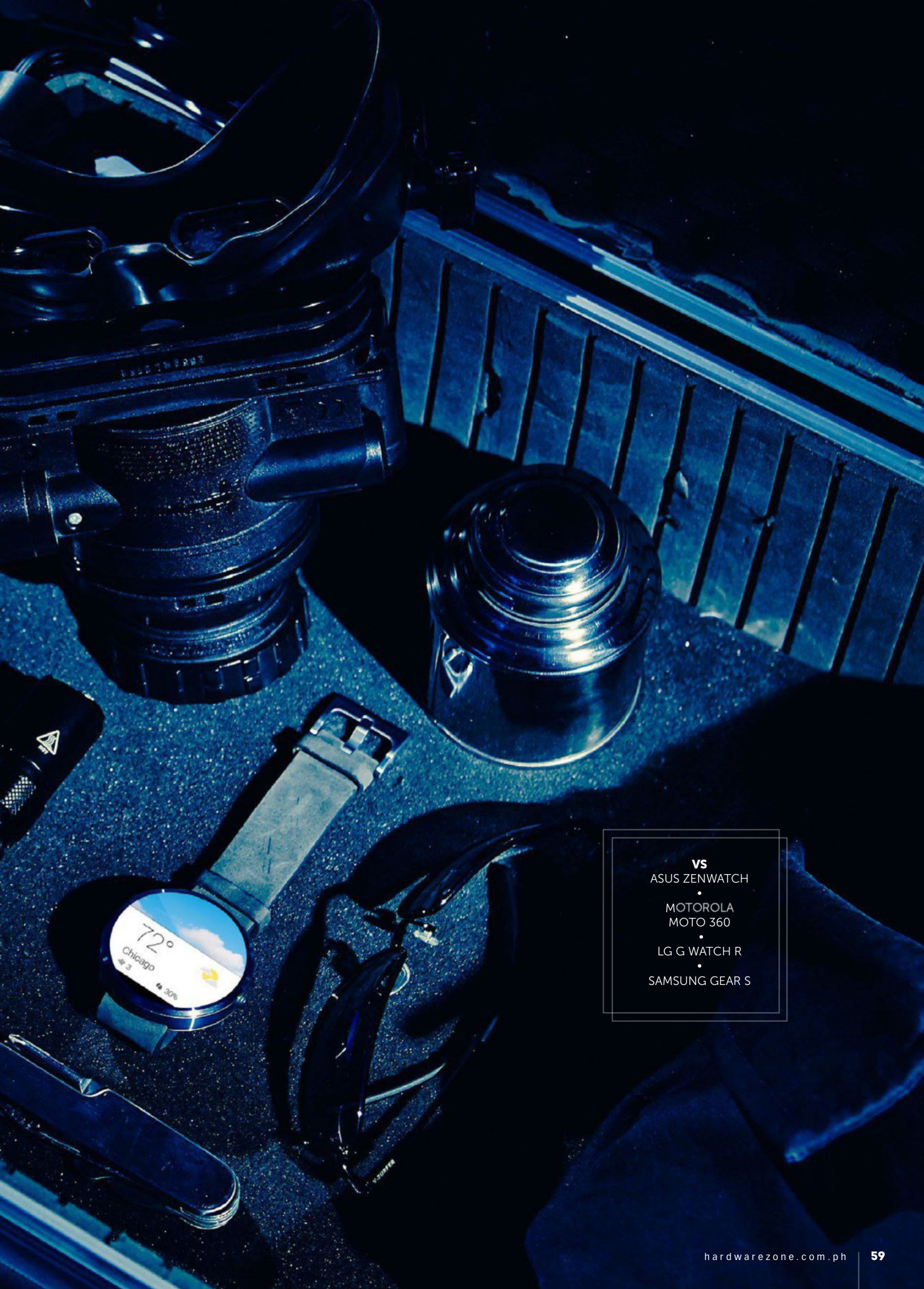
GET SMART: THE WRIST WARS

The wearable device market is quickly becoming the most hotly contested space in technology. And for almost every company invested in the area, the most lucrative piece of real estate is your wrist. But with so many choices out there, which smart watch is the best?

Text by *James Lu*

Photography by *Tan Wei Te*

Art Direction by *Ken Koh*



VS
ASUS ZENWATCH
•
MOTOROLA
MOTO 360
•
LG G WATCH R
•
SAMSUNG GEAR S

ASUS ZENWATCH

The ASUS ZenWatch is the only smart watch in our shootout sporting a square shape face. That's not to say it's boring, though. The ZenWatch's chassis is made from two layers of stainless steel, sandwiching a classy rose gold steel midsection. While the ZenWatch's display may be square, the frame is rounded, and the display itself has a slight curve, softening the watch's appearance. These soft touches make the ASUS ZenWatch the most unisex and classy of the smart watches in our shootout. Unfortunately, the bezel surrounding the screen of the smart watch is rather thick, and detracts from its overall sleekness.

The ZenWatch comes fitted with a soft tan-colored stitched genuine leather strap, with a metal deployant clasp, but you can easily swap it for any standard 22mm watchstrap if the color or style isn't to your liking.

Unlike the prominent buttons on our other smart watches, the ZenWatch's settings button is hidden on the underside of the watch. It's fairly obvious that ASUS didn't design the button to be used often as it's actually quite tricky to press with the watch worn on your wrist. As such, the main points of interaction with the ZenWatch are through its touchscreen and voice commands.

The ZenWatch has a 1.63-inch, 320 x 320-pixel AMOLED display. On paper, the ZenWatch's 278ppi should give it about the same clarity as the Motorola

Moto 360, only slightly worse than the Samsung Gear S and LG G Watch R. The reality, however, is quite different, as it's noticeably the worst of the lot. The display has a noticeable haziness, and the glass on top of the screen looks extra thick, too.

Like the G Watch R, the ZenWatch is powered by a Qualcomm Snapdragon 400 processor and runs on Android Wear. ASUS has also included a few of its own apps, including some exclusive watch faces and a nice compass app. There's also a useful camera remote app that lets you use the watch as a viewfinder for your ASUS phone's camera. As with most smart watches today, the ZenWatch includes a heart rate monitor and accelerometer for activity tracking. There's also an exclusive ASUS health and fitness app.

The ASUS ZenWatch has a unique way to measure your pulse. Instead of using an optical light sensor like most other wearables, you place two fingers on each side of the metal frame at the same time, completing an electrical circuit. Unfortunately, this isn't any faster than other methods, and seems to be less accurate, too, with erratic readings often over 100bpm despite the fact that we hadn't done anything for the past five minutes.

Battery life on the ZenWatch was decent, but not amazing. We were able to get about 18 hours out of it, but definitely requires charging every night.



Classy, unisex design. Useful exclusive apps.



Erratic heart rate monitor. Thick bezel. Hazy screen.



TAP FOR
WEBSITE 

AT A GLANCE

OS

Android Wear

Display

1.63-inch AMOLED

IP Rating

IP55

Dimension

51 x 39.9 x 7.9 ~ 9.4mm

Weight

75g

Price

US\$ 199



The ASUS ZenWatch's settings button is hidden on the underside of the watch.



The ZenWatch uses a clip-on charging cradle that fits snugly onto the back of the watch.

MOTOROLA MOTO 360

The Motorola Moto 360 was the first round-faced smart watch. It sports a sleek minimalist design, complemented by a premium build of glass and stainless steel with a leather strap made from high-end Horween Chicago leather. Having said that, while the Moto 360 is undeniably stylish, it does feel a little bulky on its thin strap, both in terms of width and overall height, and the net result makes it look more like a disc on a strap than a watch.

The watch boasts a large 1.56-inch 320 x 290-pixel resolution display (277ppi) with fairly decent viewing angles and good brightness. Compared to the other round watch in our shootout, the LG G Watch R, the Moto 360's round screen is around 39 percent bigger, with much thinner bezels, which seems like it would be the better circular display, except for the fact that the Moto 360's display isn't actually a circle. In Motorola's quest for a round screen with the thinnest outer bezel possible, it ended up adding a little black bar at the bottom of the screen that cuts the circle off. That black bar houses an ambient light sensor for auto-adjusting screen brightness. It's not a total deal-killer, but for a watch with a beautiful, clean look everywhere else, this perfection-ruining flaw certainly stands out. As a result of the bar, white watch faces all end up looking like they have a little slice cut out of them, or even worse, a whole section of dead pixels.

Like the G Watch R, on the side of the Moto 360, there's a little home button that looks like a watch crown that can be used to activate the watch or quickly bring up the settings menu. On the back of the watch, you'll find an optical green LED heart rate monitor, and inside the 360 is a pedometer for activity tracking. We found both the heart rate monitor and

step counter to be reasonably accurate, with fairly consistent results, overall.

Like the G Watch R and ZenWatch, the Motorola Moto 360 runs on Android Wear, but unlike the Qualcomm Snapdragon 400 processors found in the LG and ASUS watches, the Moto 360 uses a considerably less powerful Texas Instruments OMAP 3 processor. As a result, transitions and animations are just a little bit slower on the Moto 360.

When the Moto 360 was first released, it was plagued with bad

battery life. A recent firmware update has improved things, but you'll still only get about 16 hours of life on a single charge, which is the worst in our shootout. The Moto 360 uses a simple inductive charging cradle to recharge, no magnets or connectors required. While it's a neat and simple design, it also has its drawbacks. You need a flat surface to set the charger down on, so if you try to recharge the 360 in your bag or on in an airline seat pocket, you'll find that it won't stay in place.



**Beautiful glass.
Steel construction.
Large display.**



**Underpowered
processor. Weak
battery life.**

AT A GLANCE

OS

Android Wear

Display

1.56-inch AMOLED

IP Rating

IP67

Dimension

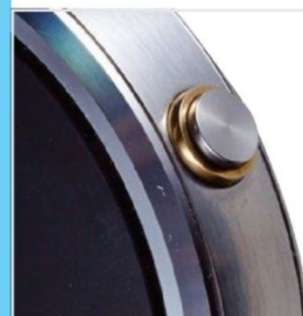
46 x 46 x 11.5mm

Weight

49g

Price

US\$ 250



The Motorola Moto 360 has a watch crown-style settings button located on the right-hand side.



The 360 uses an inductive charging cradle. Just put the watch on its cradle and it will start charging.

TAP FOR
WEBSITE



LG G WATCH R

Like the Motorola Moto 360, the LG G Watch R is a round-faced smart watch, but with its bezel markings and recessed glass, it looks a lot more like an actual watch, instead of a disc on a strap. The watch's chassis is made from stainless steel in a matte black finish, and it comes with a genuine black leather strap. The strap is a bit stiff, and isn't as nice as the leather used on the Moto 360 or ZenWatch, but it can be easily switched out for any standard 22mm watch strap. It's worth noting that while the bezel around the G Watch R's face looks like a diving bezel and has the relevant 5-minute markings, it doesn't rotate and is merely for show. Like the Moto 360, the watch has a non-rotating watch crown on the side that works as a home button. The overall look of the LG G Watch R with its chunky, angular build, and black finish is definitely the most masculine of our watches, especially when compared with the ASUS ZenWatch, which is much softer and more unisex.

The screen on the G Watch R is recessed into the body of the watch, as opposed to the Moto 360's display, which actually sits slightly above the surrounding bezel. Android Wear requires a lot of edge-to-edge swiping, so you might find that the protruding bezel gets in the way, but personally, we quite liked the noticeable stopping point. The display itself is a 1.3-inch P-OLED screen with a 320 x

320-pixel resolution (348ppi). The screen is bright and ultra-sharp, with good viewing angles, and it probably has the best color reproduction of all of our smart watches, as well. Crucially, unlike the Moto 360, the display is also a perfect circle, although the trade-off is a lack of an ambient light sensor so you'll have to manually adjust display brightness.



Beautiful fully circular P-OLED display. Good battery life.



Chunky, angular design may not suit everyone.

The back of the watch is plastic, and houses the heart rate sensor and magnetic charging connector. As with our other watches, the G Watch R has an accelerometer for activity tracking. In our testing, we found both the heart rate monitor and pedometer functions to be reasonably accurate and consistent.

Like the ASUS ZenWatch, the LG G Watch R is powered by a Qualcomm Snapdragon 400 processor and runs on Android Wear. LG has also capitalized on the G Watch R's round display with a number of exclusive Android Wear

watch faces, many of which mimic the look of high-end luxury watch faces.

The G Watch R was the best performer for our smart watches when it came to battery life, thanks to its huge 410mAh battery. We were able to get about 24 hours of battery life, even with the screen brightness set to the highest level. You'll still need to charge it every night via the magnetic clip on cradle, but you can probably stretch battery life to two days if you're unable to get to a power socket in time.

TAP FOR
WEBSITE 



AT A GLANCE

OS

Android Wear

Display

1.3-inch P-OLED

IP Rating

IP67

Dimension

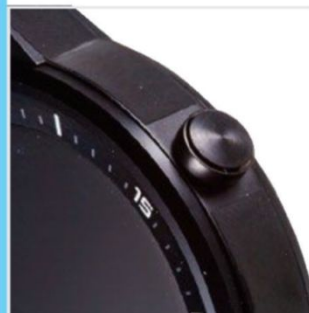
46.4 x 53.6 x 11.1mm

Weight

62g

Price

Php 13,990



Like the Moto 360, the G Watch R has a faux watch crown that acts as a settings button.



The G Watch R's uses a magnetic charging cradle that snaps to the back of the watch.

SAMSUNG GEAR S

The Samsung Gear S is the only smart watch in our shootout not powered by Android Wear. Instead, it uses Tizen, an open-source OS that, like Android, is based on Linux. With its huge display, metallic bezels, and home button beneath the screen, the Gear S looks a lot more like a tiny curved smartphone strapped to your wrist than a traditional watch. While other smart watch manufacturers have veered towards more fashionable designs, Samsung seems to be fully embracing the computer-on-your-wrist style, and the Gear S's thick housing, chunky metal clasp, and rubber strap are definitely more geek than chic. While its curved form factor makes the Samsung Gear S quite comfortable to wear, it's also ridiculously large, probably too big for most women's wrists.

The Samsung Gear S tries to win you over with its unique capabilities. It's the only smart watch in our shootout with its own micro-SIM card slot and 3G modem inside. That means you can use the smart watch without pairing it with a smartphone. You can make and receive calls directly, thanks to its built-in speakers and microphone, plus you can even respond to emails using a tiny onscreen QWERTY keyboard, although, honestly, trying to type on a 2-inch screen with one finger is just absurd. You're much better off with voice recognition, but Samsung's Tizen-based voice input isn't quite as

good as Android Wear. It works, but it often takes a few attempts to get it right. While we enjoyed the novelty of making voice calls with the Samsung Gear S, ultimately, you're still better off just getting out and using your smartphone.

The Gear S has a curved 2-inch AMOLED display with a 480 x 360-pixel resolution (300ppi), making it the largest smart watch display currently available. It is super vibrant and colorful with great viewing angles, but one quirk worth noting is that some of Samsung's older Gear apps aren't optimized for it, so they end up looking a bit stretched out and distorted. The Samsung Gear S's huge display does have some benefits, though. Thanks to its great contrast and large size, it's one of the best smart watches for reading content, and the big curved screen makes vertical scrolling easy, too.

With the Gear S smart watch running on Tizen, you won't be able to use any Android Wear apps with it. Instead, it has its own Gear App marketplace. There is less choice, of course, but the few winners to take note of include the Nike+ running app (which is still in development for Android Wear).

Despite having the smallest battery size, battery life on the Gear S was surprisingly decent, especially considering its 3G modem and large display. We were able to get about 20 hours out of it on one charge.



Built-in 3G modem lets you use it without pairing with a smartphone. Huge, vibrant display.



Too big. Looks nerdy. Limited app selection.

TAP FOR
WEBSITE 



AT A GLANCE

OS

Tizen

Display

2-inch AMOLED

IP Rating

IP67

Dimension

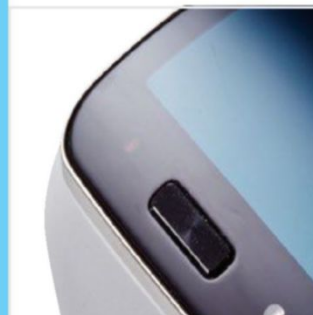
58.1 x 39.9 x 12.5mm

Weight

67g

Price

Inquire



The Gear S has a rectangular settings button beneath the screen, just like a smartphone.



The charging cradle of the Samsung Gear S snaps onto the back of the smart watch.



MODEL	ASUS ZENWATCH	MOTOROLA MOTO 360	LG G WATCH R	SAMSUNG GEAR S
OS	Android Wear	Android Wear	Android Wear	Tizen
DISPLAY	1.63-inch AMOLED	1.56-inch LCD	1.3-inch P-OLED	2-inch AMOLED
RESOLUTION	320 x 320 (278ppi)	320 x 290 (277ppi)	320 x 320 (348ppi)	480 x 360 (300ppi)
IP RATING	IP55	IP67	IP67	IP67
STRAP TYPE	Standard 22mm leather with clasp deployment	Custom leather strap with pin buckle	Standard 22mm leather with pin buckle	Custom rubber strap with clasp deployment
PROCESSOR	Qualcomm Snapdragon 400	Texas Instruments OMAP 3	Qualcomm Snapdragon 400	Qualcomm Snapdragon 400
SENSORS	19-Axis (Gyroscope, Accelerometer, Compass), Biometric heart rate monitor	Pedometer, Optical heart rate monitor, Ambient Light	9-Axis (Gyroscope, Accelerometer, Compass), Heart rate monitor, Barometer	9-Axis (Gyroscope, Accelerometer, Compass), Heart Rate, Ambient Light, UV, Barometer
BATTERY	370mAh	320mAh	410mAh	300mAh
DIMENSIONS	51 x 39.9 x 7.9 ~ 9.4mm	46 x 46 x 11.5mm	46.4 x 53.6 x 11.1mm	58.1 x 39.9 x 12.5mm
WEIGHT	75g	49g	62g	67g
PRICE	US\$ 199	US\$ 250	PhP 13,990	Inquire

AND THE BEST SMART WATCH IS...



LG G WATCH R

Unlike smartphones, which are basically rectangular slabs with screens on them, smart watches have a lot more room to play with different form factors, styles, and even display shapes. With that in mind, the two watches that stood out to us were the Motorola Moto 360 and LG G Watch R. While there's nothing wrong with traditional square-faced watches (in fact, we quite like them), they just look too much like tiny computers strapped to your wrist. Between the Moto 360 and G Watch R, while we liked the minimalist style of the Moto 360, the black bar that cuts off the bottom section of the screen ruins an otherwise elegant design. On the other hand, the G Watch R's chunky, angular black aesthetic looks more aggressive and masculine, but it also looks a lot more like a watch, especially with its faux diving bezel. The LG G Watch R's excellent battery life, gorgeous crisp display, ability to take any standard 22mm watch strap, and snappy processor sealed the deal for us.

GOING WITH INK

The laser printer may still be king of volume in a large office, but inkjet printers are slowly taking over the home and small offices due to constantly improving print speeds, accurate color reproduction, and lower ink costs. We look at three of the latest models to determine which is the best bet for your small office or home office.

Text by *Hafeez Sim*
Photography by *Jasper Yu*
Art Direction by *Ian Chong*



Page 3 of Printer Test Document (Text)

In making my selection I have chiefly tried to make the stories characteristic. It would have been easy, especially from Kennedy, to [re]have made up a volume entirely filled with "Grimm's Goblins" à la Caligula. But one can have too much even of that very good thing, and I have therefore avoided as far as possible the more familiar "familiar" of folk tale literature.

She was the creature of fairest form, of loveliest aspect, and of gentlest nature that existed between earth and heaven in all Ireland—whatever colour of hue she had before, there was nobody that looked into her face but she would blush fiery red over it.

"Well, Connachar, we will not accept that offer from you, nor thank you for it. Greater by far do we prefer to go home to our father and tell the deeds of Uisnech, and Allen and Arden are as nearly related to yourself as you are also, Connachar."

He came to the cow, "What I'm seeking. Going for..."



vs
BROTHER MFC- J2720
•
EPSON L555
•
HP OFFICEJET PRO 8620

BROTHER MFC-J2720

The MFC-J2720 is Brother's flagship inkjet printer for 2014, and it comes with features that make it suitable for your small office. Scanning and fax is a given, though the MFC-J2720 also comes with duplex printing, so you won't need to manually flip the pages over when printing double-sided documents. A 50-sheet automatic document feeder (ADF) lets you print, copy, and scan without having to attend to the printer. Unlike the other two printers in this shootout, the J2720 is able to handle A3 paper, so you can print photographs and spreadsheets that include more detail. Paper handling is also impressive, as it can handle 500 sheets of paper at a go with its dual paper trays. This puts it quite a bit ahead of the other two in terms of paper handling and flexibility, as the two trays make it easy to switch

between printing different paper sizes.

Don't forget the multi-purpose tray, which handles up to 80 A4 sheets or five A3 sheets of paper, bumping up the paper handling quantity even further. You can skip using your computer to print, as the MFC-J2720 lets you print JPEG files and compatible documents directly from a USB flash drive, media cards, or a PictBridge-compatible camera. With built-in Wi-Fi, you can print directly from your iPhone, iPod Touch, or iPad with the free Brother iPrint & Scan app. With the app, you can also bypass your computer and scan directly to your iOS devices. The MFC-J2720 has a 3.7-inch touchscreen control panel, and it's easy to use. You can also view the current ink levels, and the option to align the print heads is easy to find as well.



A3 printing. Large paper handling. User-friendly touchscreen.



Average print speed.

AT A GLANCE

Print resolution

1200 x 6000 dpi

Scan resolution

2400 x 2400 dpi

Automatic duplex

Yes

Paper Handling

250 sheets (Standard tray), 250 sheets (Lower tray), 80 sheets (Multi-purpose tray)

Dimensions

490 x 345 x 308mm

Price

PhP 15,950



TAP FOR
WEBSITE



The Brother MFC-J2720 can store up to 500 sheets of paper.



The printer has a 3.7-inch touchscreen display.



The Brother MFC-J2720 printer can also handle A3 paper.

EPSON L555

The Epson L555 has the smallest footprint among the printers tested here, so you will have no problems using this printer in a smaller office setup. But even then, the L555 manages to squeeze in a 30-sheet automatic document feeder so you can print, copy, or fax multi-page documents without having to manually feed each sheet.

Paper handling is modest, as the Epson L555 comes with a single paper tray that can handle 100 sheets at a go. Inkjet ink cartridges aren't known to be inexpensive, and costs can go up quickly if you're doing a lot of printing. But the Epson L555 uses the ink tank system, so you can save a lot even if you're doing a fair bit of printing, as the ink refill bottles cost at just US\$ 9.90 per bottle. Unfortunately, the Epson L555 is the only one in this lineup that does not have automatic

duplex printing, so you will have to manually flip the pages over when printing double-sided documents.

In terms of wireless printing and scanning, the

Epson L555 all-in-one ink tank system printer seems to be quite competent. With built-in Wi-Fi and the help of the free Epson iPrint app, you can print webpages, documents, and PDF files directly from both your iOS and Android devices. You can also scan and save directly to your iOS and Android devices, in addition to being able to upload the scanned files or documents to cloud services such as Box.net, Dropbox, Evernote, or Google Drive. The L555 from Epson does not have a

touchscreen display, but it comes with a conventional control panel and a two-line monochrome display.

+
Compact.
Affordable ink tank.
Cloud support.

-
No duplex support.
Small paper capacity.

AT A GLANCE

Print resolution

1440 x 5760 dpi

Scan resolution

1200 x 2400 dpi

Automatic duplex

No

Paper Handling

100 sheets

Dimensions

474 x 377 x 226mm

Price

Php 14,495



TAP FOR
WEBSITE 



The L555 sports a conventional control panel.



The Epson L555 lets you refill the tanks yourself.



The Epson L555 printer offers a 30-sheet ADF.

HP OFFICEJET PRO 8620

In terms of size, the HP Officejet Pro 8620 is the largest here, so it might be a bit difficult for those with limited real estate in their offices. The Officejet Pro 8620 is in the middle of the pack when it comes to paper handling, with a 250-sheet input tray, as well as a 50-sheet automatic document feeder. It also comes with a print duplexer, so there's no need to flip the pages yourself when printing double-sided documents. You can also scan documents to and print from a USB flash drive. You can connect the printer to your office network through Wi-Fi or Ethernet with its 10/100 Ethernet connectivity, and share what your printer has to offer, plus print directly from your iOS, Android smartphone, or tablet. And even if there's no access to a local network in your office, you can

still enable secure wireless printing and print from your smartphone or tablet, as the printer has Wireless Direct, which is HP's own form of Wi-Fi Direct.



Comprehensive network support. Wireless Direct. NFC.



Bulky. Scanning can be a hassle.

One thing unique about the Officejet Pro 8620 all-in-one printer is that it comes with near-field communication (NFC), so in theory, you can just tap an NFC-enabled smartphone to print a document or file. The Officejet Pro 8620 opts for a 4.3-inch touchscreen control panel, making it the largest among the three printers tested. It is generally easy to navigate the printer's interface, though for scanning, you will have to use the desktop software to do so. While this approach offers you more control over your scanned files, it does delay the scanning process if you want to scan something without adjusting any settings.

AT A GLANCE

Print resolution

1200 x 4800 dpi

Scan resolution

1200 x 1200 dpi

Automatic duplex

Yes

Paper Handling

250 sheets

Dimensions

499.3 x 647.5 x 314mm

Price

US\$ 299.99



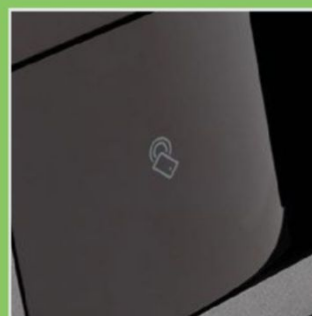
TAP FOR
WEBSITE



It comes with a 4.3-inch touchscreen control panel.



The ADF of the Pro 8620 can handle up to 50 sheets.



The Officejet Pro 8620 printer comes with NFC.

BROTHER MFC-J2720

The Brother MFC-J2720 sits right in the middle when it comes to print speed. Print speed for black and white documents is 17.9 pages per minute, but it did manage to outperform the HP Officejet Pro 8620 when it came to printing color documents, with a print speed of 15 pages per minute. It takes the Brother MFC-J2720 59.16 seconds to scan a 10-page color document job, and 18.99 seconds to scan an A4 full-color photographic print.

The Brother MFC-J2720 has the best text print quality among the three. It's the sharpest, so there are definitely no problems in using the printer to print business documents. Detail and color saturation is similar to the Epson L555, so there's slightly less detail and color saturation when compared to the HP Officejet Pro 8620. Photo prints are slightly less saturated than the Epson L555, which has the best performance in this test. There's also a very slight yellow cast to the print.



There's a very slight yellow cast to the print.

Page 10 of Printer Test Document (Text)

In making my selection I have chiefly tried to make the stories characteristic. It would have been easy, especially from Kennedy, to [vi]have made up a volume entirely filled with "Grimm's Goblins" à la Celtique. But one can have too much even of that very good thing, and I have therefore avoided as far as possible the more familiar "formulæ" of folk-tale literature.

She was the creature of fairest form, of loveliest aspect, and of gentlest nature that existed between earth and heaven in all Ireland—whatever colour of hue she had before, there was nobody that looked into her face but she would blush fiery red over it.

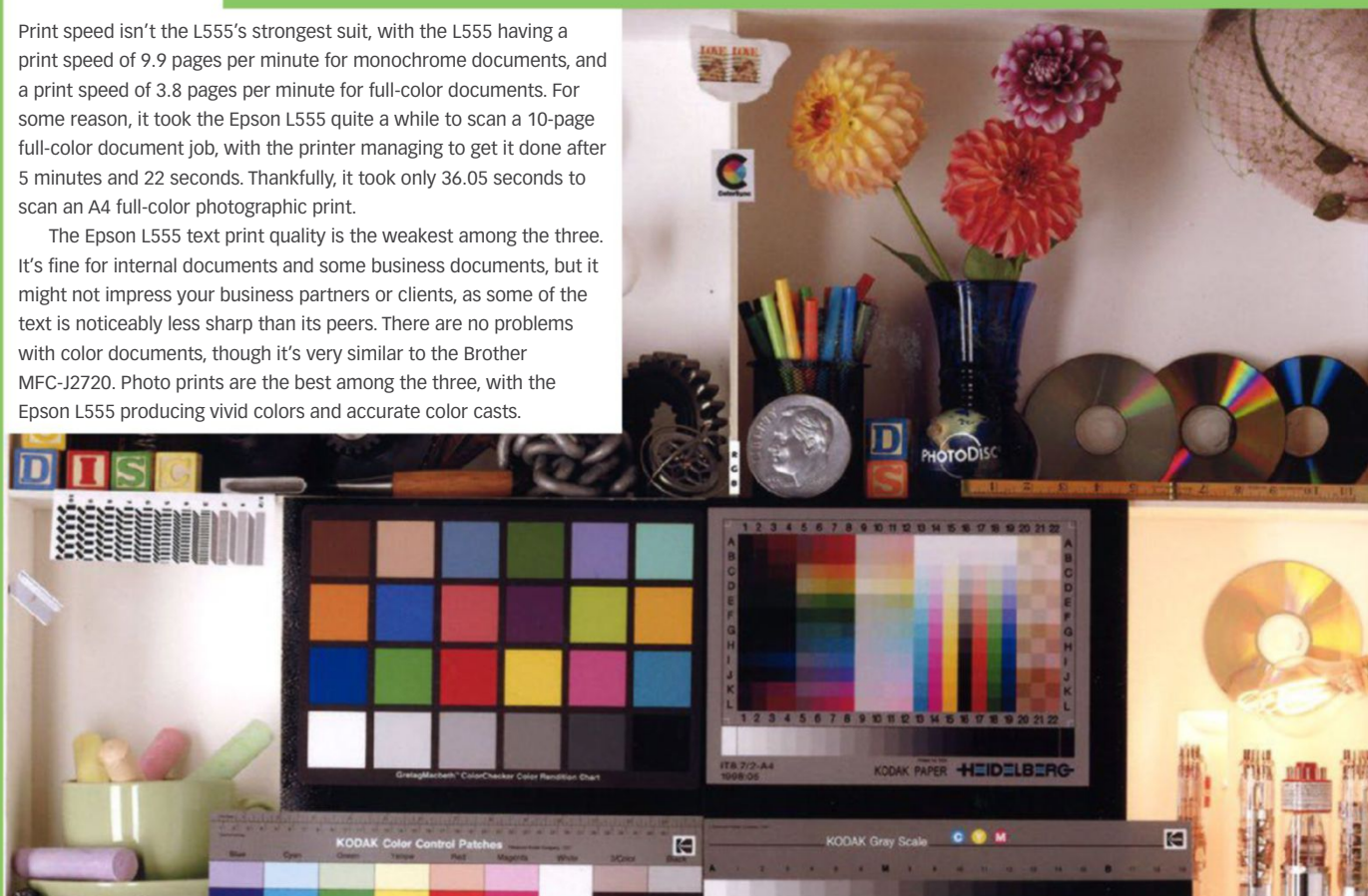
"Well, Connachar, we will not accept that offer from you, nor thank you for it. Greater by far do we prefer to go home to our father and tell the deeds of heroism we have done, than accept anything on these terms from you. Naois, son of Uisnech, and Allen and Arden are as nearly related to yourself as they are to us, though you are so keen to shed their blood, and you would shed our blood also, Connachar."

The text is the sharpest among all three printers.

EPSON L555

Print speed isn't the L555's strongest suit, with the L555 having a print speed of 9.9 pages per minute for monochrome documents, and a print speed of 3.8 pages per minute for full-color documents. For some reason, it took the Epson L555 quite a while to scan a 10-page full-color document job, with the printer managing to get it done after 5 minutes and 22 seconds. Thankfully, it took only 36.05 seconds to scan an A4 full-color photographic print.

The Epson L555 text print quality is the weakest among the three. It's fine for internal documents and some business documents, but it might not impress your business partners or clients, as some of the text is noticeably less sharp than its peers. There are no problems with color documents, though it's very similar to the Brother MFC-J2720. Photo prints are the best among the three, with the Epson L555 producing vivid colors and accurate color casts.



Colors are vivid and accurate.

Page 10 of Printer Test Document (Text)

In making my selection I have chiefly tried to make the stories characteristic. It would have been easy, especially from Kennedy, to [vi]have made up a volume entirely filled with "Grimm's Goblins" à la Celtique. But one can have too much even of that very good thing, and I have therefore avoided as far as possible the more familiar "formulæ" of folk-tale literature.

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Some of the text is noticeably less sharp than its peers.

HP OFFICEJET PRO 8620

If print speed is on the top of your list, then the HP Officejet Pro 8620 will definitely not disappoint. With print speeds of 24 pages per minute for monochrome documents, and 12 pages per minute for color documents, the Officejet Pro 8620 is quick. That speed is also present when scanning documents and photographs, with the Officejet Pro 8620 taking 52.66 seconds to scan a 10-page color document job and 8.11 seconds to scan an A4 full-color photographic print.

Text print quality sits right below the Brother MFC-J2720. It's generally sharp, but some fonts display a tiny bit of fuzziness when compared to the Brother MFC-J2720. There's a bit more detail and color saturation, however, for color documents. Photo prints of the Officejet Pro 8620 are generally pleasing, but exhibit less color saturation than the other two models.



Colors are less saturated as compared to the others.

HardwareZone.com / HWM Printer Test Document (Text)

In making my selection I have chiefly tried to make the stories characteristic. It would have been easy, especially from Kennedy, to [vi]have made up a volume entirely filled with "Grimm's Goblins" á la Celtique. But one can have too much even of that very good thing, and I have therefore avoided as far as possible the more familiar "formulæ" of folk-tale literature.

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"Well, Connachar, we will not accept that offer from you, nor thank you for it. Greater by far do we prefer to go home to our father and tell the deeds of heroism we have done, than accept anything on these terms from you. Naois, son of Uisnech, and Allen and Arden are as nearly related to yourself as they are to us, though you are so keen to shed their blood, and you would shed our blood also, Connachar."

Text is generally sharp, but some fonts display a tiny bit of fuzziness.

AND THE BEST INKJET MFP IS...



BROTHER MFC-J2720

The Brother MFC-J2720 may not be the fastest in terms of print speed in this shootout, but it is pretty close to the HP Officejet Pro 8620 that makes it reasonably fast enough for most day-to-day demands. It's a great all-rounder in terms of print quality, too, with very sharp text plus sufficient color saturation and details in color documents. As an office printer, though, we feel that the outstanding feature that puts the MFC-J2720 ahead of the rest is its paper handling. Out of the box, you can already load up to 580 sheets in total, and it is the only one capable of A3 printing.



We Do **WEB 2.0!**

* The Internet constantly changes, and as its capabilities expand, so do ours. With the advent of new means to stay connected with people, such as social networking, microblogging, and media streaming, the Hardware Zone team maximizes them to deliver to you the latest and most relevant updates from the IT and consumer electronics world in real time!

facebook.

Be A Fan! Be A Friend!

* With a user base of over 800 million people and growing, Facebook is today's most excellent avenue to reach diverse audiences. Our Facebook pages serve as a melting pot of updates from HWM Philippines and HardwareZone.com.ph. www.facebook.com/HWM.Philippines and www.facebook.com/HardwareZonePH

twitter

Follow Us!

* Short, sweet, and simple - these are words that exactly describe the Twitter phenomenon and why around 300 million registered users across the globe love it. Harnessing this straightforward style, we serve you tech news hot off the press. www.twitter.com/HardwareZonePH

You Tube

We Broadcast!

* If pictures are worth a thousand words, then videos speak volumes. Our YouTube channel showcases footage from recent events, product test shots, and more. The real celebrities are the technologies and innovations. www.youtube.com/HardwareZonePH

A DAY WITH HYBRID

No one can say for certain what the destiny of the automobile will be, but one thing is for certain: Hybrid and full-electric automobiles are here to stay for the foreseeable future. We spend 24 hours with Porsche's Panamera S E-Hybrid to get a taste of hybrid technology and see if they really are the future.

Text by **Kenny Yeo** Photography **Jasper Yu** Art Direction **Ken Koh**

In light of available evidence, it is hard to argue against global warming. One of the direct contributors to this phenomenon is the increase in greenhouse gases trapped in the atmosphere. According to studies, in 2011, in the United States alone, over six billion metric tons of greenhouse gases in the form of carbon dioxide were released into the atmosphere, and that roughly 28% of this was caused by transportation in the form of cars, trucks, ships, planes, etc.

Today, the majority of cars are powered by internal combustion engines that run on gasoline and diesel. Although engines have become increasingly efficient, these engines are innately inefficient. In fact, when an internal combustion engine burns fuel, only about 25% to 30% of the energy released is used to provide motive force;

the rest is used to overcome friction, turbulence, power auxiliary components such as the oil and water pumps, and also lost to the atmosphere as heat and noise.

Electric-powered cars can help our current

"They offer the best of both worlds: the practicality of a traditional internal combustion engine car and the efficiency of electric cars."

predicament, as electric motors are considerably more efficient in their use of stored energy and can effectively convert around 80% of stored energy (in the form of lithium-ion batteries)

into motive force. However, they are limited by current technologies. For example, electric cars still suffer from limited range, and the time it takes to charge batteries are still miserably long. Additionally, there is a serious lack of infrastructure to support these types of cars to make them practical enough for mainstream adoption and widespread use.

As a result of the limitations of present electric car technologies, hybrid-powered cars are seen as the perfect solution to the environmental conundrums that we face. Because hybrid-powered cars typically rely on both an internal combustion engine and electric motors for propulsion, they offer the best of both worlds: the practicality of a traditional internal combustion engine car and the efficiency of electric cars.



TYPES OF HYBRIDS

Broadly speaking, hybrids cars fall under three main categories depending on their capabilities.

Mild Hybrids

Mild hybrids refer to cars with limited hybrid utilization. In the case of automobiles, it means that they cannot run solely on batteries alone – the engine cannot be switched off. Some examples of mild hybrids include the Honda CR-Z and Insight, and Mercedes-Benz's S400 Hybrid.



Full Hybrids

Full hybrids, sometimes known as strong hybrids, are hybrid cars that can run solely off batteries, just off the engine, or a combination of both. The main difference between full and mild hybrids is that the former can run purely on electricity, albeit for a limited range. Most hybrids are full hybrids and some examples include the Toyota Prius, Chevrolet Volt, and even the new McLaren P1 and Porsche 918 Spyder hypercars.



Plug-in Hybrids

Some full hybrids are also known as plug-in hybrids. As the name suggests, these cars have batteries that can be recharged by plugging in to the electric grid either via regular wall sockets or using specialized charging equipment. They can then use this energy that was stored while being plugged in to travel for a limited range before activating their internal combustion engine to increase range. An example of a plug-in hybrid is Porsche's Panamera S E-Hybrid.

FUEL SIPPER

How does the Porsche Panamera S E-Hybrid match up against other hybrids and some of the most popular and outrageous cars on our roads? (All figures based on manufacturer's claims.)

Porsche Panamera S E-Hybrid:
3.1L / 100km



Toyota Prius: 3.9L / 100km



Honda CR-Z: 4.9L / 100km



Toyota Altis: 6.5L / 100km



Kia Forte K3: 6.8L / 100km



Honda Odyssey: 7.9L / 100km



Mercedes E200: 6.1L / 100km



Audi A6 2.0 TFSI:
6.5L / 100km



HYBRID DRIVETRAINS

The drivetrain refers to the group of components used to generate and deliver power to the road. Generally speaking, hybrid drivetrains fall into three broad categories – series, parallel, and series-parallel – and differ in the way that their electric motors are used to augment the car's drivetrain. Let's find out how by beginning with the series hybrid drivetrains, which is the simplest of the three.

Series

Series hybrids are called so because only the electric motor is used to drive the wheels, the internal combustion engine is only there to drive a generator which charges the electric motor during long-distance driving. Essentially, these are really electric cars with an onboard generator that is powered by an engine.

The series hybrid drivetrain attempts to reconcile the weakness of the two forms of motors. Electric motors are highly efficient and provide good torque over a wide speed range, but, unfortunately, batteries take ages to recharge and charging stations are not as widespread as gas stations. On the other hand, the traditional internal combustion engine draws energy from fuel, which can be replenished quickly and easily. But, it is only at its most efficient when running at a constant speed.

As such, the electric motor provides the motive force, so that the internal combustion engine can be designed to run at maximum efficiency to power the generator.

Series hybrid vehicles are designed primarily for use in urban environments where commutes are generally shorter. This way, they can be powered solely by batteries, thus keeping emissions down, and relying only on the internal combustion engines when trips out of town are required.

Parallel

Parallel hybrids get their names because their drivetrains are designed in such a way that the internal combustion engine and electric motor are powering the car at the same time. The premise behind the parallel hybrid drivetrain is for the electric motor to assist the engine in providing energy to the wheels, so that car makers can downsize the engine but still maintain the same level of performance.

Because the electric motor is only there to assist the engine and not take over duties completely, cars with a parallel hybrid drivetrain typically use smaller battery packs. The smaller battery packs, along with the smaller engine, help reduce vehicle curb weight, which also help improve overall fuel efficiency. Since cars with parallel hybrid drivetrains cannot run on batteries alone, they are also known as mild hybrids.

Since the batteries in parallel hybrid systems are small, they are typically recharged using regenerative braking or via the engine during cruising when power demands are low. Alternatively, if the drivetrain is set up such that the electric motor drives one axle and the engine drives the other, the batteries can be charged by loading the electrically driven wheels during cruising. Such a setup is capable of providing four-wheel drive.

Series-Parallel

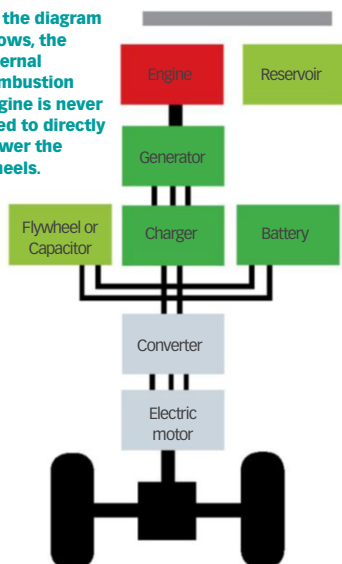
The series-parallel hybrid drivetrain, also sometimes known as the power-split drivetrain, is the most common system used in hybrid cars today. This was popularized by the Toyota Prius. It is the most complex, but it is claimed to offer the best efficiency because if designed correctly, the engine and batteries will operate at their most efficient points more frequently.

Unlike pure series and parallel drivetrains, the premise behind the series-parallel drivetrain is flexibility in that the car can be powered by the electric motor and engine together or individually. Typically, this is achieved by coupling the engine, electric motor, and gearbox and using automatically controlled clutches to control the drivetrain. For instance, if the car was running solely off the electric motor, the clutch between the internal combustion engine and the gearbox would be left open, while only the clutch between the electric motor and gearbox would engage.

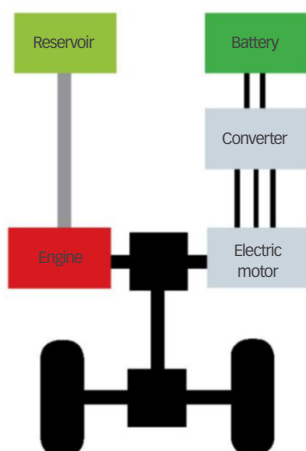
In practical usage, what happens is that in low-speed or stop-start environments such as in the city, the car will operate only using energy stored in the battery without the engine. This is where the electric motor is at its most effective because it produces maximum torque from a standstill, which is ideal for acceleration. At higher speeds or when cruising, the engine takes over because this is where the electric motor becomes less efficient.

Hybrids that utilize this type of drivetrain are also known as full hybrids and some even offer plug-in charging capabilities.

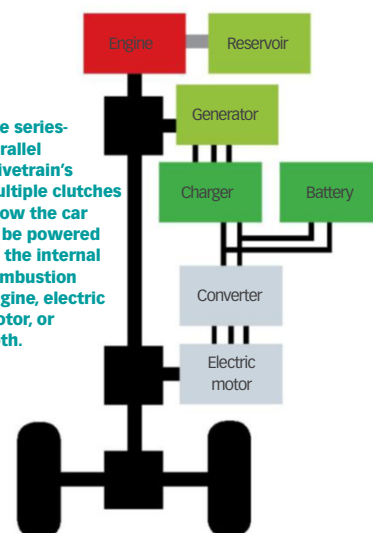
As the diagram shows, the internal combustion engine is never used to directly power the wheels.



Both the internal combustion engine and electric motor are used to provide power to the wheels.



The series-parallel drivetrain's multiple clutches allow the car to be powered by the internal combustion engine, electric motor, or both.



DRIVING THE PORSCHE PANAMERA S E-HYBRID

Let's begin by addressing the elephant in the room. At over half a million dollars, the Panamera S E-Hybrid is by no means an affordable everyday car.

And even if you consider its efficiency, there is no way the Panamera S E-Hybrid is going to be more cost-effective than an affordable model from a Japanese or Korean maker. That said, the Panamera S E-Hybrid was the first plug-in hybrid to reach our shores and has one of the best hybrid drivetrains in the market today. Hence, it is a good starting point for us to get a taste of hybrid technology.

The Panamera S E-Hybrid is powered by a combination of a traditional internal combustion engine and an electric motor. The internal combustion engine is an Audi-derived supercharged 3-liter V6 that churns out 333hp, whereas the electric motor produces 70 kilowatts or around 95hp. Together, the car has a combined power output of 416hp and 590nm of torque. That's a respectable amount of grunt, sufficient to haul the car from 0 to 100km/h in just 5.5 seconds. So, despite the eco-friendly positioning of the Panamera S E-Hybrid, this car is still a properly fast Porsche.

The Panamera S E-Hybrid has three driving modes: E-Power, E-Charge, and Sport. E-Power is the default setting that the car starts in, and

in this mode, the car is powered mostly by the electric motor, and the internal combustion engine only comes on when absolutely necessary. To avoid drivers unintentionally summoning the supercharged 3-liter V6, an artificial step is added to the accelerator in this mode, and the engine only comes on when drivers press beyond this point. As a result, the Panamera S E-Hybrid starts silently, and this was a slightly disconcerting experience for us since we were expecting to hear the rumble of the V6 when we started the

"Despite the eco-friendly positioning of the Panamera S E-Hybrid, this car is still a properly fast Porsche."

car. Surprisingly, despite the Panamera S E-Hybrid weighing over two tons, the electric motor never felt insufficient or underpowered, though overtaking can be a little tricky. Still, it accelerates briskly enough and can even reach a maximum top speed of 135km/h on electric power alone.

More impressive, however, is its range. Porsche claims a maximum range of 36km is possible on a fully charged battery, and we do not doubt it. Even on a half-full battery, we easily

managed 20km. This is made possible by the efficiency in which the car recovers energy during normal driving. For instance, energy is recovered whenever the brakes are applied and also whenever the car goes into coasting mode – the instances where the car is "gliding" without any motive force.

The E-Charge mode is, as its name suggests, the mode to use if you want to charge the batteries. In this mode, excess energy from the internal combustion engine is used to charge the battery. Together with the energy recovered during braking and coasting, the battery charges significantly quicker. In our experience, we managed to get the battery up to around 40% charge after about 30km.

Sport mode is the setting you want to be in to experience the full fury of the hybrid drivetrain. In this mode, full performance, from both the supercharged 3-liter V6 and the electric motor, is available at any time. Together, the engine and the electric motor produce a whopping 590nm, and this can be easily appreciated whenever you dig your right foot deeper into the carpet. The immediacy of the electric motor helps fill out the torque gaps nicely and is quite impressive to see a car as large and heavy as the Panamera S E-Hybrid surge forward with such urgency. One can really tune to the Panamera S E-Hybrid to feel and drive like a bona fide sports car.









LEARN

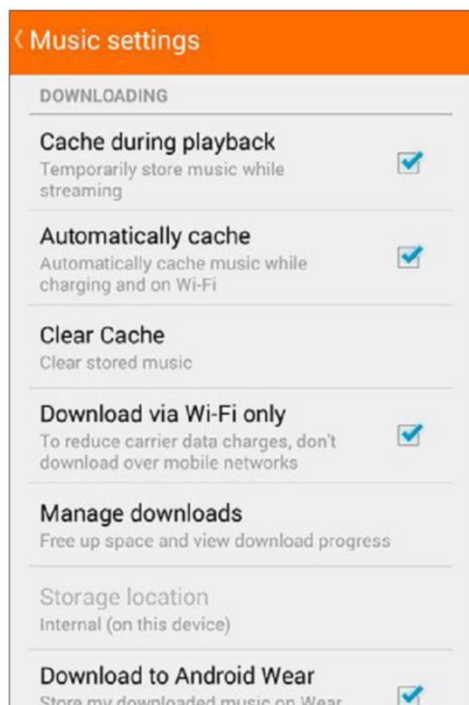
ANDROID WEAR

Android Wear is Google's version of Android for smart watches and other wearables. The OS has been designed to work on a small scale, with voice commands and minimal touch input as your main navigation points. If you've just bought your first Android Wear device, or you just want to get more out of your existing wearable, here's everything you'll need to know to get the most out of Android Wear.

Text by *James Lu*
Art Direction by *Ian Chong*

CHANGE YOUR WATCH FACE

There are two ways you can select a different watch face. The easiest way is to just hold down on the current watch face, then scroll through the options. If you don't see anything you like, your most recently used watch faces will be found all the way to the left. Alternatively, you can go to the settings menu by tapping the clock, then scrolling all the way to the bottom, then scrolling down again to "Change Watch Face."



LISTEN TO MUSIC OFFLINE (EVEN WHEN YOUR PHONE ISN'T IN RANGE)

The latest Android Wear update enabled offline music playback via Google's Play Music app; that means you can store audio tracks on your watch and listen to them even when your phone is out of range.

Start by opening Play Music on your phone, then head to the Settings screen and scroll down to the Download to Android Wear option – enable this to start syncing songs over to your smart watch. Songs, albums, and playlists can be marked for offline listening; just note that most smart watches don't have a huge amount of storage space, so you'll have to be selective with what you transfer.

Once you've synced your music, go to the Play Music app on your watch. You'll see a list of songs you've synced. You can swipe down to display different playlists, or swipe left on the chosen playlist to start playing it on shuffle. Swipe left again and you'll get to the track listing, which will let you pick a specific track to play.

Note that very few smart watches have their own speakers, so you'll have to pair a set of Bluetooth headphones with your watch to listen to music.

GET FAMILIAR WITH NOW NOTIFICATION CARDS

Now Cards are notification cards similar to Google Now that pop up from the bottom of your screen. These include text messages, emails, and missed phone calls, as well as traffic and weather updates. As of update 4.4W.2, you can opt to have these notification cards remain on your screen until swiped away (just swipe down to dismiss them), or to only pop up for a few seconds before disappearing. Toggle between the two settings by going to the Settings menu and selecting the "Card Preview" option. Opting for "Watch face sets card preview" will allow notifications to remain on the display, while selecting "None" will not. Whichever you select, you can see your unread notifications by swiping up from the bottom of the display.

To scroll through your notifications, keep swiping up. If you want to see more info on a card, just tap it. Some cards will display extra options when you tap them, for example, a Gmail card has options that let you archive, reply, or open Gmail on your phone. When you're done with a card, dismiss it by swiping from left to right. Dismissing a card on your watch will dismiss the same notification on your phone and vice versa.

If you accidentally dismiss a card and want to retrieve it, you can do so by immediately swiping down from the top of your watch's display and pressing the "Dismissing" button with the reverse arrow on it. You have about five seconds (there's a little timer surrounding the button that shows you how much time you have left) before the notification is gone forever.



CHOOSE FROM A LIST OF THINGS YOUR SMART WATCH CAN DO

If you're in a public space and you don't want to talk to your watch, you can bring up a list of things it can do. Just wake the screen up, then touch anywhere on the screen. You'll see a white screen with a red "g" on it. Below the letter is a list of things your watch can do, such as "show me my steps," "show me my heart rate," and "set a timer."

You can also open any installed apps from this screen, just scroll all the way to the bottom and select the "Start" option. This will display your list of installed apps. To install more apps, open Android Wear on your phone, scroll to the bottom of the screen, and select the "Browse suggested apps" option. Anything you choose to install will automatically sync to your watch.











CHANGE YOUR WATCH MODE BASED ON YOUR ENVIRONMENT

If you've updated to Android 5.0 Lollipop on your smartphone, your Android Wear device will have been updated with two specialized modes: Theater, which deactivates the screen and turns vibrations off, and Sunlight, which momentarily boosts screen brightness, for when you're trying to read the display outdoors. Swipe down on the watch face then swipe to the right to find these modes. Sunlight mode automatically deactivates itself after a few seconds, but Theater mode has to be toggled off manually; just double-tap the screen, or if your watch has a physical button on the side, just press that to get back to normal.



GET USED TO SPEAKING TO YOUR WATCH

While a few wearables boast two-inch screens, most smart watch screens are much smaller. It can be tricky to input commands or even navigate the menu with your finger on such a small screen, so your main point of interaction should be with your voice. Start by waking the screen up by touching the display, bringing the watch up to your face, or by pressing a button on the watch (if it has one), then saying "Okay, Google..." You can follow up with almost any query or command you can think of, such as "set an alarm for 6PM today," or "what is 15 percent of 32?" or "what's the weather like today?"

Block app	
	Connect
	Gmail
	Hangouts
	Fit
	Android System WebView
	Android Work Assistant
	Basic Daydreams
	Bluetooth Share

SELECT WHICH NOTIFICATIONS GET PUSHED TO YOUR WATCH

If you don't want to be spammed by non-stop notifications on your watch, you can choose which notifications go through and which stay on your phone. Do this by going to the Android Wear app on your phone and opening the "Mute app notifications" option. You can then select which apps you want to blacklist, preventing them from forwarding notifications to your watch.

ADOBE CREATIVE CLOUD LIBRARIES MADE EASY

by Jimmy Tang



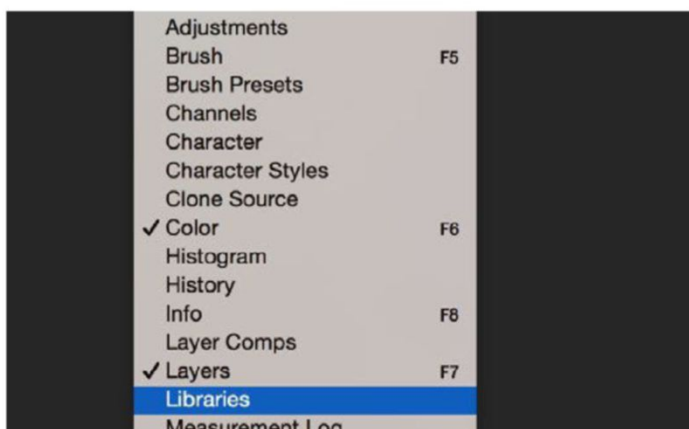
Have you ever experienced the frustration of searching through your files for commonly used creative assets, or having to open multiple files in different applications to get the common design elements you need for your project? Or when you're done with your project, only to realize that you've ended up with outdated creative elements?

All of that will be behind you with Adobe's latest update to its Creative Cloud suite of software. If you're a subscriber of Adobe CC,

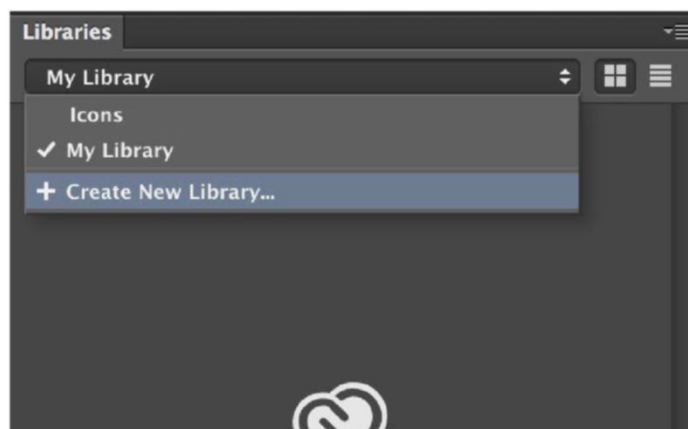
the October updates would have enhanced your favorite applications with the library feature that helps you manage your creative assets and help you streamline your project workflow. It's built to help designers manage and access their favorite colors, color themes, brushes, type styles, and raster and vector graphics through Creative Cloud.

Let's run through some of the basics of Adobe's new Creative Cloud Libraries in Adobe Photoshop CC 2014.

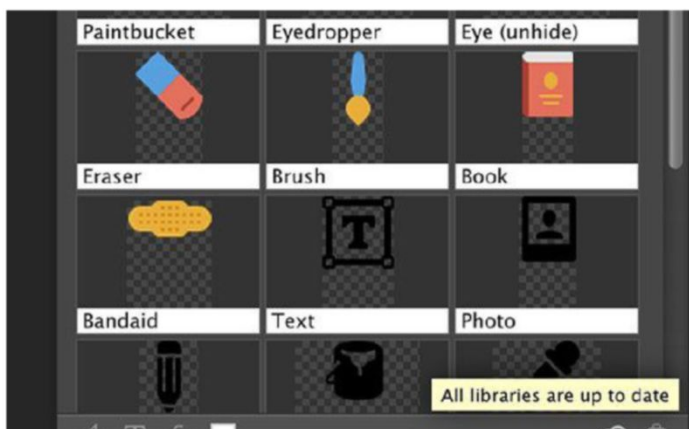
1) Open the Libraries panel by going to the Window menu and choosing the Libraries option.



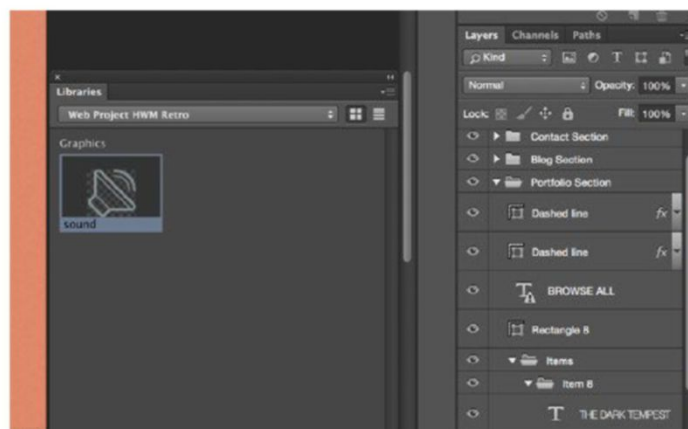
2) Create a new library for your project by selecting Create New Library from the dropdown menu. Give it a descriptive name so that it's easily identified once it's synced to your Creative Cloud.



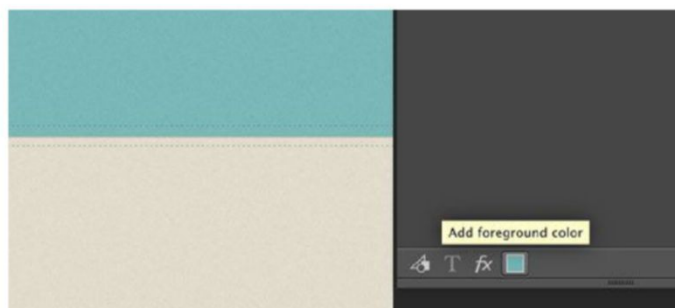
3) The icon on the bottom-right of the panel will tell you if your assets are synced to Creative Cloud. Once they are in the cloud, you can access them in other applications like Illustrator and Adobe's mobile apps.



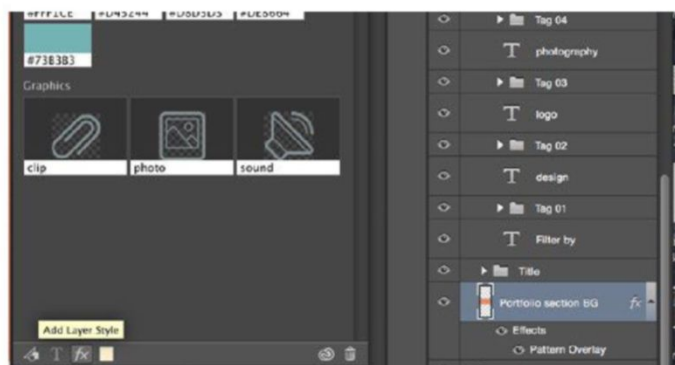
4) To add assets into project library, select the object from the layer's panel. Once you've selected the right layer, press the V key to use the move tool to drag the object and drop directly into the libraries panel. The asset will then be synced automatically to the Creative Cloud and appropriately labeled as a graphics object. If you don't want to drag and drop, you can also click the Add Graphic icon on the lower-left corner of the Libraries panel.



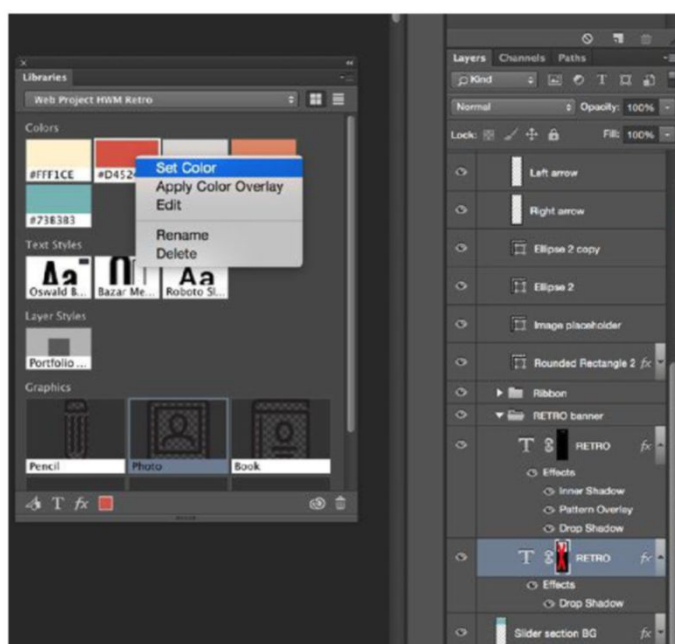
5) To add color, find and select the object from the layer panel. Once it's highlighted in the layer's panel, you can click the Add Color button in the Libraries panel to add it into the project library. You can see that it's added and labeled as colors. All other colors added from now on will be grouped under colors, so it'll make accessing your project's color palette a whole lot easier.



7) Similarly, a layer style can be added to the library. You can do this by simply selecting a layer that contains a layer style and then clicking the Add Layer Style button in the Libraries window.



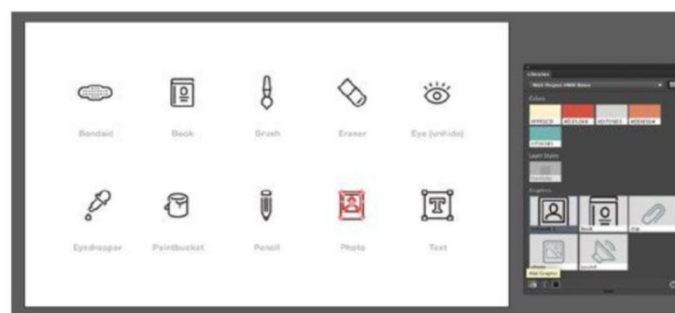
9) The process to apply the creative assets you've collected in your library to your project is very much the same. If you're applying a text style to your project, select the appropriate text object in your layer panel and, subsequently, click the text style in your libraries panel. The same goes for color and layer styles.



6) You can also add type styles by choosing a type layer in the layer panel and click the Add Text Style button,

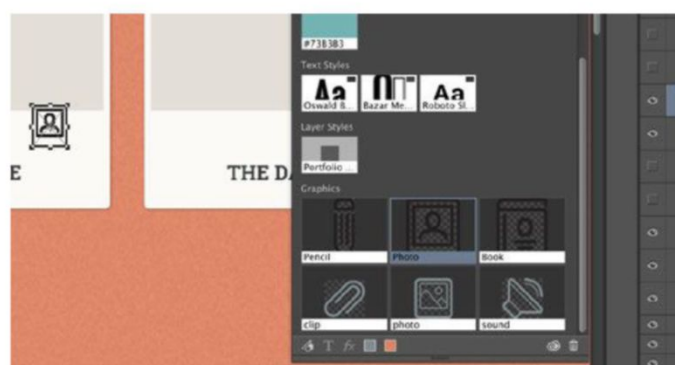


8) You'll notice by now that all these creative assets are stored in the cloud that can also be accessed in other applications. Similarly, you can add other assets to the project library from other applications like Illustrator and Adobe mobile apps, too.



The Creative Cloud libraries panel is also available in other applications like Adobe Illustrator CC 2014.

10) An image object saved into your project library from Illustrator can also be dropped into your Photoshop project simply by dragging and dropping it from the libraries panel. If it's a vector art, it will be automatically converted into the right format in Photoshop.



The vector graphics extracted earlier in Step 8 from Adobe Illustrator can be easily dragged into the Photoshop workspace from the Libraries panel.

As you can see from this simple exercise, Creative Cloud Libraries let you access and gather your creative assets in a single location, accessible anytime on any computer through selected applications, as long as you're connected to the Internet. When your assets are always within your control, maintaining an updated and consistent set of assets for any of your creative projects will help you streamline your workflow while making it easier to focus on your designs.

BASIC ANIMATION WITH MAYA 2015

by Salehuddin Husin

Welcome back! Here's the final part of our basic Maya tutorial, animating your creations. Hopefully, you already have your models all ready for this part. Animation is tricky, but once you get the hang of it, is extremely easy and fun.

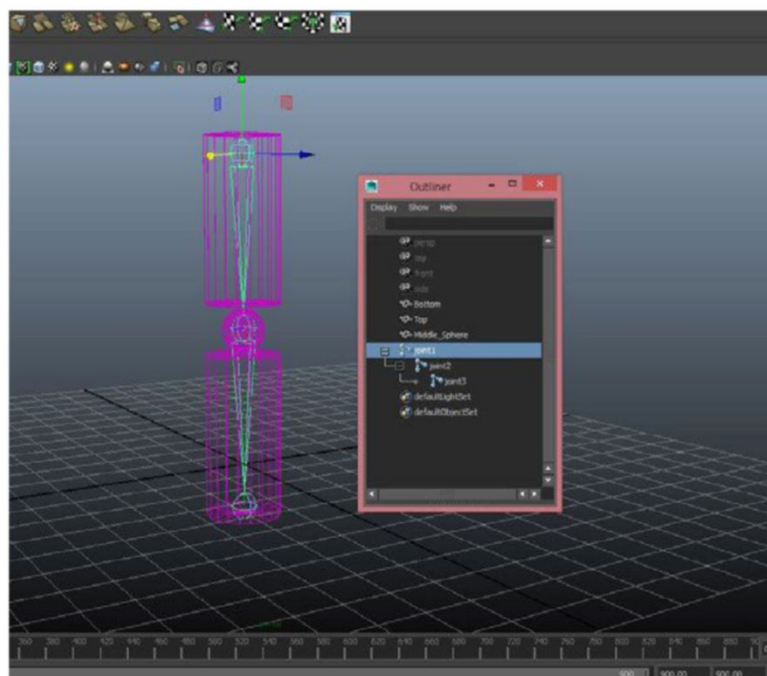
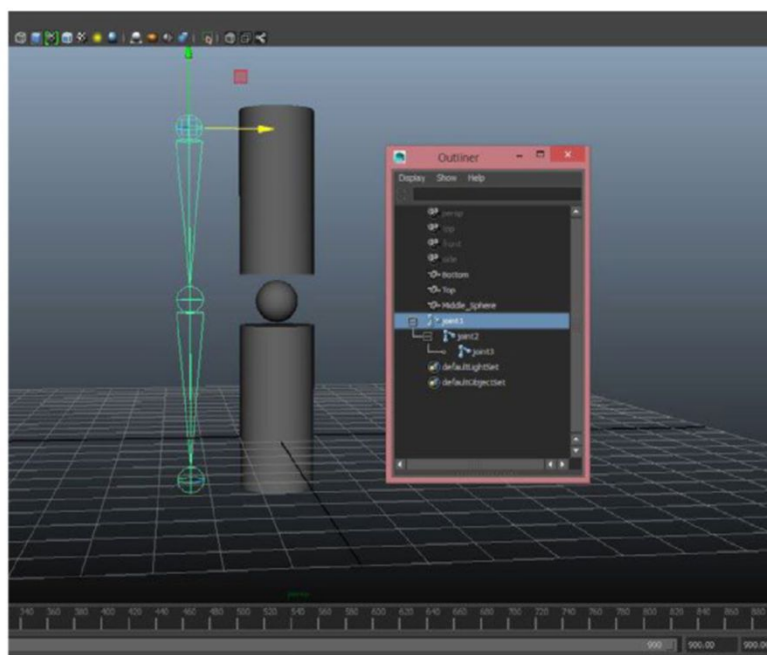
1) First, we're going to break down the basics. See the row of numbers at the bottom of the screen? That's your Time Slider. It shows where you are in your animation, as well as how long your animation is. Typically, 24 frames is one second, although you can change this setting by going to Window > Settings/ Preferences > Preferences > Settings > Working Units. For now, we'll stick with 24fps, with a total frame count of 120 frames, for 5 seconds of running time.

Make sure the Outliner window (Window > Outliner) is open. Enter Four View (hit Spacebar) and you'll get to four separate views of your scene. Find the one that looks Front or Side (either's fine). Now, make sure the Menu Set is (upper left) set to Animation. This will make the Skeleton menu (upper middle) appear. Click it and select the small box near Joint Tool. The cursor will change into a crosshair, and the Joint Settings menu will pop up. Using the Front or Side view, click the top of your model, the attaching joint, and then the other models. In our case, we'll click the top of the first cylinder, the sphere, and then the bottom of the other cylinder, for three joints. Depending on your model, you might want to have more.

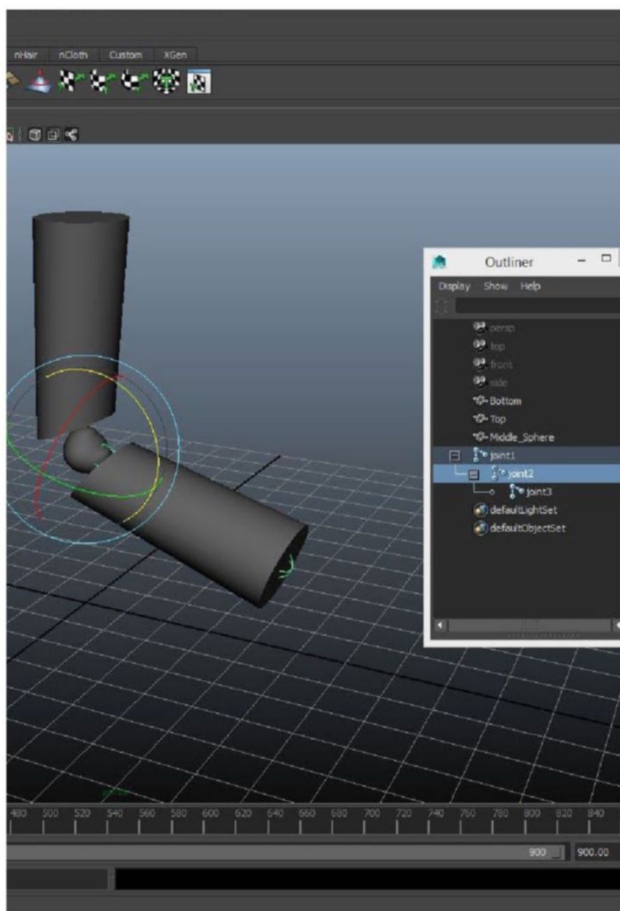
2) Now go back to Perspective view (hover the mouse over the view in Four View and hit Spacebar) and make sure that the joints are inside your models.

Here's the tricky part. In the Outliner, click on the first joint (Joint1 in our case) and then CTRL-click with your first model (Top for us). With those two selected (and only them), click on Skin (top menu) and then Smooth Bind. That'll bind the joint to the models. Now, repeat with Joint2 for your second model and so on.

Once done, go back to the Outliner and select a joint. Since we have three, we're using Joint2 because it offers the most dramatic effect. With joints bound to the models, moving one will move them all.



3) Now that you can move the models using the joints, it's time for the animation. Set the time slider ranges to 120 (the two boxes at the "No Anim Layer" box) and then click on 0 in the time slider itself. That'll take you to Frame 0, the beginning. Select the joint you want to animate and hit S. S is the shortcut to keyframe a frame, meaning the frame saves the position of every object in that frame. Move to Frame 24, adjust your joint to a desired direction, and then hit S again.



Congratulations! You've just made your first animation. With 24 frames done, you can move the Time Slider back and forth to view the animation. Just remember to hit S every time you want to keyframe an animation and you'll be set.

Animating with joints is the same, albeit much easier. Simply select the object you want, hit S at the frame you like, and then move the object to anywhere you choose, to any frame you want. Hit S, and you're done. If you have knowledge in Flash animation, keyframing should be very familiar and intuitive to you.

Finally, once you have all the animating done, it's time to render. Hit Render Settings, then Common. Under Image format, choose JPEG. Take note of the render directory, then change the Menu Set (upper left) to Rendering. Pick Render from the top menu and then Batch Render. That's it! Alternatively, if you don't want JPEGs, you can render as AVI format, though that only works if you're using Maya Software to render instead of mental ray. Using that is easier, but the trade-off is that all your texturing work and other fancy effects won't be rendered, just the basic polygons.

Assuming you rendered as JPEGs, you now need to link those files into an AVI using a program called VirtuaDub. Load your images, then export as a video. Enjoy your animation video and use it to impress your friends.

BROWSE THE WEB DIFFERENTLY ON YOUR IPAD

by Zachary Chan

The way we use a mobile device is different from a desktop computer. Take software, for example. On computers, you generally know exactly what you need. Smartphones introduced the concept of the app store, which is more of an exploratory experience. Similarly, the way you browse the Internet can be different. Most websites default to simplified versions when they detect a mobile device. And even if you force the desktop version to load, you'll often run into navigation and layout issues. If you're looking for an alternative approach on your iOS device, you could try Opera Coast, which has recently had a major upgrade to version 4.0. Here are four reasons why you should give Opera Coast 4.0 a try:

1. Opera Coast is designed for touch-based navigation. Yes, you can bring out the search bar if you want to specifically visit a page. However, like the App Store, results are visual rather than just plain text. Also, in Opera Coast 4.0, there is a new Discover feature where you'll get curated content pushed to you when you bring up the search bar. When you're on the go and don't really have time to sit down and digest your daily bookmarks, this is a great feature to hop around with topics that seem interesting. Who knows, you might just find a new favorite site.

2. Most websites have some form of share button, but it's not always apparent, and sometimes they don't have a link to your preferred social network or messaging app. Copy-pasting links from a website on a smartphone can also call for some finger gymnastics. Opera Coast 4.0 has its own built-in share button that allows you to post just about any content to popular messengers and social networking sites like Facebook, Twitter, WhatsApp, and Line. Again, it does this in a visual manner so your link looks like a customized image rather than a text URL.

3. Opera Coast 4.0 supports Handoff, which is part of Apple's new Continuity features. This becomes a great way to continue surfing from your iPad to your Mac once you've reached home (or the office). You can now jump between different browsers, screens, and other devices, too. While this feature is not limited to Coast, your other devices/browsers will need to support or have Handoff enabled.

4. Lastly, Opera Coast 4.0 finally comes with Opera Turbo compression technology. This feature was previously only available in the Opera Mini version of the browser for iOS. Opera Turbo is a server-side compression technology which routes the pages you're loading to dedicated Opera Turbo servers first, which then try to reduce data sizes as much as possible before sending it to you. This often results in lower bandwidth usage for you and helps load pages faster. While Turbo doesn't work on all content, especially encrypted ones like online banking, it is very useful for general surfing, especially if you have a low data cap or in an area with very bad connection speeds.

SYNCING AUDIO FOR VIDEO

by *Marcus Wong*

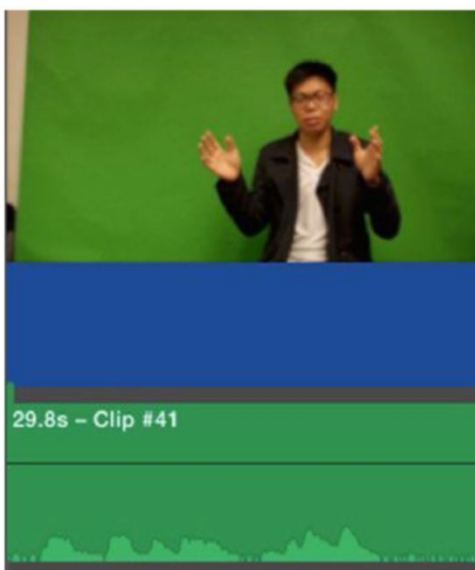
Nothing feels more unnatural than watching video that is out of sync with the audio, but quality audio means incorporating an external audio source. Read on to find out just how to get all your feeds perfectly in sync.

As good as the in-built microphone on your DSLR is, you'll probably want to invest in a separate audio recorder as you progress with your video explorations.

That's because the recorder from your camera is likely to capture everything that's going on when you're recording, which may not be optimal for getting clear dialog from your main subject.

A separate recorder placed near the speaker allows you to get focused sound for clear audio, but introduces an extra element that you'll have to deal with: syncing the two feeds so the audio matches the video.

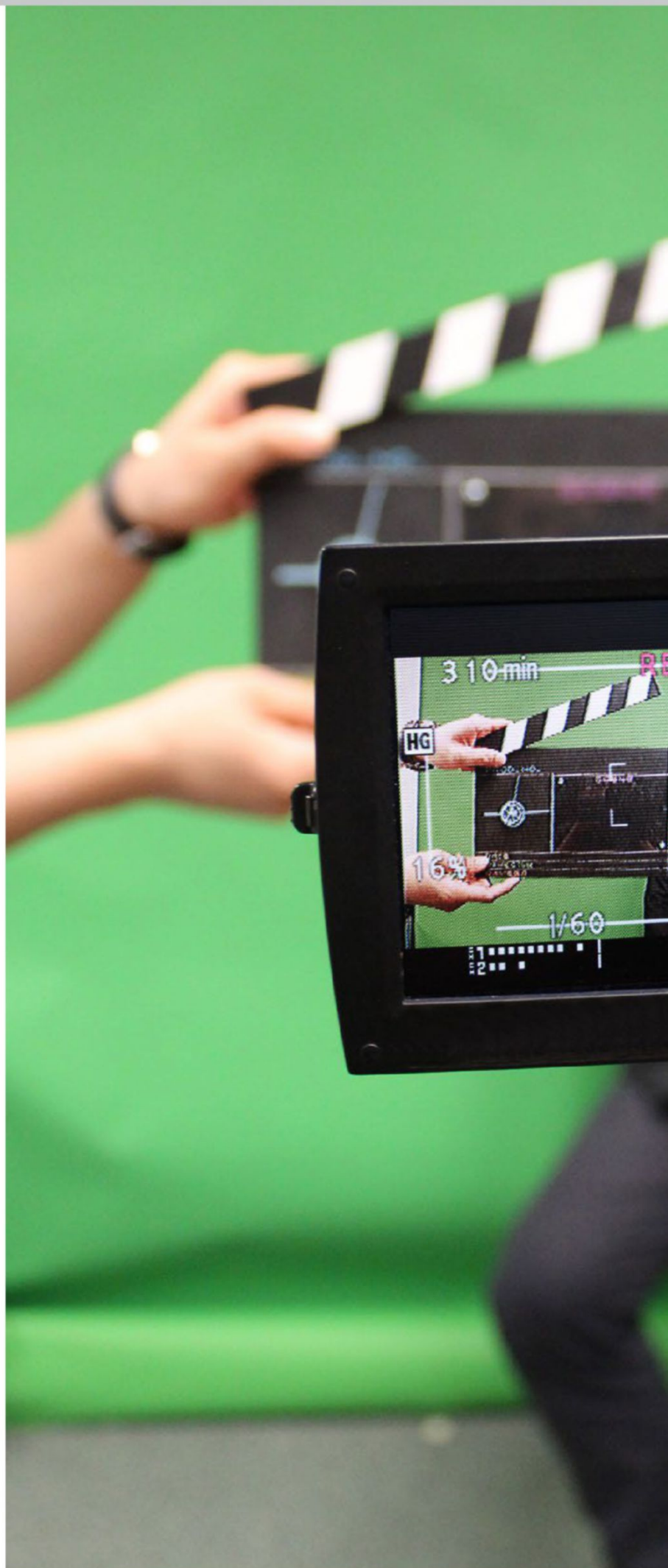
Here are a few quick tips to let you do just that:



MATCH THE WAVEFORMS

You'll probably notice when you drag a video clip into your editing software that there's a corresponding audio track below it. That's the audio from the camera itself, and gives you a guide as to where to place the track.

Remember that loud sound you made at the start of recording? That will show up as a spike in both the audio from your camera and the audio from the recorder. Match the two spikes, and you'll be well in sync!





USE A CLAPPER OR SOME OTHER DEVICE TO MAKE A LOUD SOUND JUST AFTER YOU HIT RECORD

This way, the noise is captured by both your camera and the audio device at the exact same time. Do this for every take, and you'll have an easier time matching all the audio back later. (And more so if you're using multiple cameras.)



KEEP A TIME LOG OF WHEN RECORDING STARTS AND ENDS

If possible, have someone keep track of all the times you hit "record" and "stop" for the day, and add notes about each take so you know exactly which portion you're looking to use. This is especially handy if you follow the tip above and leave the audio on all the time, as you can just jump forward to the appropriate segment of audio by time.



LET THE AUDIO STAY ROLLING AND ONLY PAUSE THE CAMERA

While video files are large, the size of audio is much more manageable, so you can probably afford to leave your audio devices running the entire time. This helps since you don't have to worry about trying to simultaneously start both video and audio capture, and later, you can just play back the audio to the appropriate point.



THE WILD SIDE

KC MONTERO · JIMMY MUNA
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Subscribing to HWM is a steal of a deal! Not only do you get 20% savings for a monthly serving of good reads, you can also win cool stuff, just like Gregorio Narvasa, who won a WD My Passport Wireless mobile storage as a bonus to his year-long subscription!

STEP 2

YOUR DETAILS

Name	_____
Mailing Address	_____ _____ _____ _____ _____
Home No.	_____
Office No.	_____
Mobile No.	_____
Fax No.	_____
Email	_____
Gender	<input type="radio"/> Male <input type="radio"/> Female

Education

- ☐ Primary
- ☐ Secondary
- ☐ College
- ☐ Graduate
- ☐ Post-graduate
- ☐ Others

Industry

- ☐ Advertising/Media
- ☐ Automotive/Transportation
- ☐ Construction/Engineering
- ☐ Education/Training
- ☐ Finance/Accountancy
- ☐ Government
- ☐ Hospitality/Tourism
- ☐ Information Technology
- ☐ Legal
- ☐ Logistics/Distribution
- ☐ Manufacturing
- ☐ Medical/Health Care
- ☐ Military
- ☐ People/Real Estate
- ☐ Telecommunications
- ☐ Others

TELL US MORE ABOUT YOURSELVES

Occupation

- ☐ Executive Management
- ☐ General Management
- ☐ Administrative/Support
- ☐ Sales/Marketing/Distribution
- ☐ Call Center
- ☐ Self Employed
- ☐ College Student
- ☐ High School Student
- ☐ Others

Monthly Income

- ☐ PHP 5,000-PHP 8,000
- ☐ PHP 8,001-PHP 12,000
- ☐ PHP 12,001-PHP 18,000
- ☐ PHP 18,001-PHP 25,000
- ☐ PHP 25,001-PHP 35,000
- ☐ PHP 35,001-PHP 50,000
- ☐ PHP 50,001-PHP 100,000
- ☐ PHP 100,001 and above

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STEP 3

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☐ Cash ☐ Check

Enclosed is my check payment made payable to: **HardwareZone Philippines Corp.**

Name of Bank _____

Check Number _____

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BE IN THE CLOUD



Looking for the device to store your files? The WD My Cloud EX2 is perfect for you! It's an easy-to-manage private cloud storage, where you can choose a populated system that works out of the box or build your own NAS with its diskless enclosure. Streaming media files on your smart TV, gaming console, or on a WD TV Live media player is also easy. With its Twonky 7.2 DLNA-certified 1.5 media server and iTunes server, you won't

even have a hard time streaming large movie and music libraries. Also, you're armed with multiple options to secure your data from loss!

If you want to be in the cloud, you're just in time, as we're giving away a WD My Cloud EX2 this month! Just share with us two features of the Western Digital's private cloud storage that interest you the most for a chance to win.



Send in your entries via email to editor.ph@hwzcorp.com together with your name, address, and telephone number. For more information about the product, visit www.wdc.com.ph.

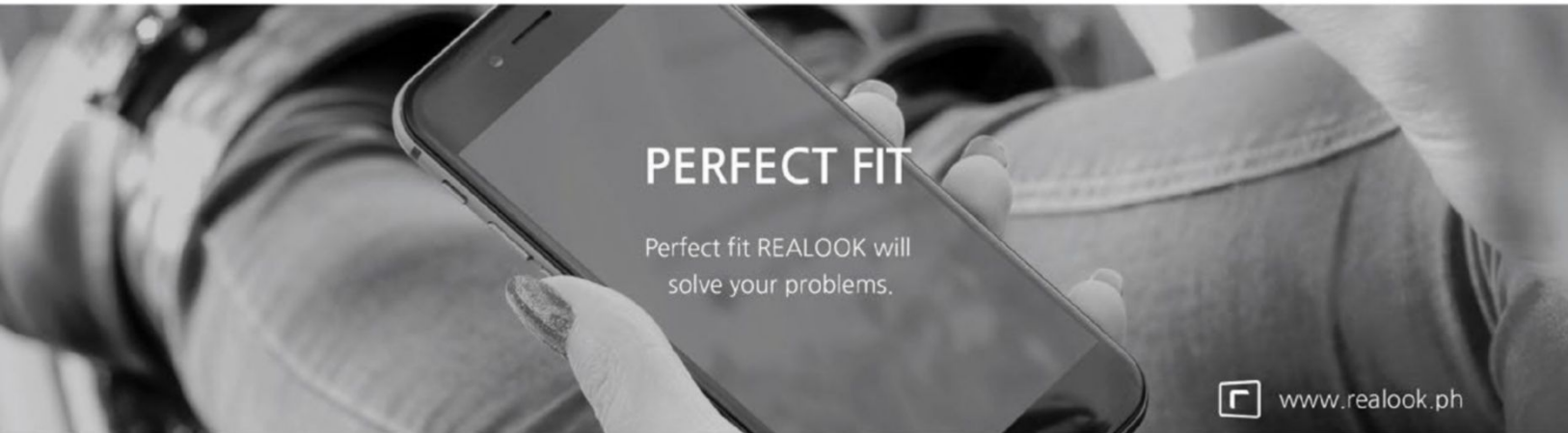


WIN THIS!

The HWM Team congratulates Ezra Reyes, the winner of the Realook screen protector from our February issue contest.



Terms and Conditions • This contest is open to all HWM readers except staff of Hardware Zone Phils. Corp. • The qualifying period for this contest is until 31 March 2015. • Only the winner(s) of the contest will be notified via email. • Winners are given 15 days to respond to the notification email and another 15 days since replying to claim their respective prizes. Prizes not claimed within this period will be forfeited. • Selection panel's decisions are final and no correspondence will be entertained. • Only one (1) entry per reader in a particular contest. • Should the specified prize be no longer available (e.g., phased out), the contest sponsor may change the prize to another product of similar or equal value. • By sending in your entries, you are agreeing to the above-mentioned terms and conditions.



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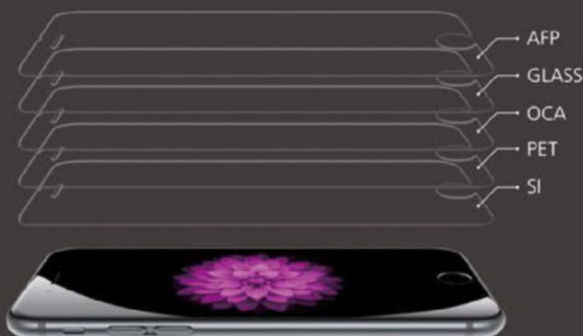
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SCREEN PROTECTOR

Clear world. View through REALOOK. Offer excellent transmittance for a clear picture. Highly transparent hard coating protect the device from external shocks and scratches.



TEMPERED GLASS

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